University of Alberta

An Exploratory Study of the Characteristics of Injection Drug Users With Recent Acquisition of HIV in Edmonton

by

Nancy Carol McPherson

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of Master of Science

in

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Nancy C McPherson

April 5, 2002

Box 24
R.R.#4
Brandon, MB
R7A 5Y4

University of Alberta

Faculty of Graduate Studies and Research

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled *An Exploratory Study of the Characteristics of Injection Drug Users With Recent Acquisition of HIV in Edmonton* submitted by Nancy Carol McPherson in partial fulfillment of the requirements for the degree of Master of Science.

Dr. Doug Wilson, Supervisor

Dr. Stan Houston

Dr. Brenda Munro

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Abstract

A qualitative study was conducted to explore the social and contextual factors that directly or indirectly lead to HIV transmission among injection drug users. Data were collected through semistructured individual interviews with 10 participants who contracted HIV infection within the past two years while living in northern Alberta. The data were analyzed utilizing thematic content analysis. Using determinants of health as a framework, three key areas were explored: the context in which individuals are at risk of contracting HIV infection through injection drug use, barriers to existing education and prevention programs and services, and indicators for designing and implementing an effective and comprehensive HIV prevention program in Edmonton. The study concludes with implications for future research and recommendations for practice.

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CHAPTER ONE

INTRODUCTION

The effectiveness of a needle exchange program is well documented and the availability of injection drug equipment and condoms have become the foundation of HIV prevention programs for injection drug users throughout industrialized countries (Des Jarlais et al., 1996; Hagan, Des Jarlais, Friedman, Purchase, & Alter, 1995; Myers, Millson, Rigby, Rankin, & Mindell, 1994). Yet the incidence of HIV infection continues to rise in some communities.

Given the diversity of environmental factors that affect individual behaviors, it is important to examine the social and contextual factors that directly or indirectly affect HIV transmission. Further research is required to gain an understanding of the lived experiences of recent seroconverters as the foundation for supporting at-risk populations to build on their own capacities for achieving health and also to better understand the limitations of existing interventions for this population. Using the determinants of health as a framework, a qualitative research study has the potential to unearth factors not previously understood as contributing to an individual's risk of HIV infection.

Health professionals and community workers are well positioned to support individuals at risk for contracting HIV infection. "The intent of health professions is to understand humans, their health, and other related phenomena and to use this understanding to promote meaningful life experiences" (Hinds, Chaves, & Cypress, 1992, p. 61). Similarly, understanding has been regarded as the ultimate purpose in conducting research, and occurs when what was previously unknown becomes known and meaningful to others (Munhall & Oiler, 1992). Therefore, understanding the complex

lives of individuals at risk of contracting HIV infection is the cornerstone to effective HIV education and preventive measures. Effective interventions can only be developed and implemented if the multiple contexts of risk of HIV infection occurs are truly understood and valued.

Purpose of the Study

The purpose of this study is to better understand the complex lives of injection drug users who have recently contracted HIV infection and the circumstances related to seroconversion. The information gleaned from this study will provide valuable knowledge of the factors that contribute, either directly or indirectly, to the acquisition of HIV. The following questions will guide this research project:

1. What is the context in which individuals are at risk for contracting HIV infection through injection drug use?
2. What are the barriers to existing education and prevention programs and services for individuals at risk of HIV infection through injection drug use?
3. What are the indicators for designing and implementing an effective and comprehensive HIV prevention program for injection drug users in Edmonton?

Significance of the Study

Despite the presence of a needle-exchange program since 1990, as well as other supports for this at-risk population, the incidence rate of HIV infection in Edmonton is continuing to rise. "From 1986 to 1996, in Alberta, the proportion of HIV-positive tested persons who were IDU increased from 10.6 to 26.4%" (Alberta Health; as cited in Jacobs et al., 1999, p. 168). There were 68 new cases of HIV infection diagnosed in Edmonton

in 1999, and injection drug use was identified as the exposure category for 38.7% of new cases of HIV in Alberta for the same year (Alberta Health, 2000).

This study is an exploration of the characteristics of injection drug users in Edmonton. It is designed to examine the lifestyle of injection drug users and, by focusing on those who have demonstrated their risk status by having recently converted and on the time period surrounding infection, to better understand the context in which infection occurs. Research on determinants is intended to guide the development of effective interventions. With a deeper understanding of determinants, their interactions and contextual influences, the sophistication of public health programs and their subsequent impact should improve (Edwards, 1999). The results of this study will contribute to the knowledge of community health staff and the development of more effective health promotion/harm reduction programs for injection drug users in Edmonton and other similar communities.

Expected Outcomes

1. An in-depth understanding of the context of risk for individuals who have recently acquired HIV infection through injection drug use in Edmonton.

2. Exploration of previously unrecognized determinants of HIV infection risk in this population.

3. Identification of the barriers to existing education and prevention services for individuals at risk for contracting HIV infection through injection drug use in Edmonton.

4. Indicators for the design and implementation of a comprehensive HIV prevention program for injection drug users in Edmonton.

Definition of Terms

Recently acquired: individuals with laboratory evidence of HIV acquisition within the past two years

Injection drug related: both prescription and nonprescription drugs administered through injection

Injection drug related HIV: the presence of HIV whereby injection drug use is thought to be the most likely source of infection

Determinants of health: the range of personal, biological, social, economic, and environmental factors that influence the health of populations (Health Canada, 1996)

Harm reduction: a set of practical strategies that reduce the negative consequences of drug use (Harm Reduction Coalition, 2000)

Summary

This first chapter provides background information for the qualitative study including the rationale for the study, the research questions, and the expected outcomes. The next chapter contains a literature review focusing on the health and social issues related to injection drug use and risk behaviors contributing to the acquisition of HIV infection through injection drug use. An overview of the Determinants of Health is provided as a framework for the investigation. The research methods and procedures used in this study are described in Chapter Three. The analysis of the data is discussed in Chapter Four, and the final chapter presents a discussion of the findings including suggestions for future research.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This literature review will begin by providing an overview of the health and social issues related to injection drug use. The importance of the social context of injection drug use are discussed, and an overview of the behaviors reported to contribute to HIV infection is provided. The Determinants of Health as a framework for the investigation are described, and the concept of harm reduction as an approach to HIV prevention is introduced. Finally, two theoretical models relevant to the findings of this study are presented.

HIV Among Injection Drug Users in Canada

The HIV epidemic has changed significantly in Canada since the early 1980s when it was concentrated in men who had sex with men. In 1996, approximately half of the estimated 4,200 new HIV infections that occurred in Canada were among injection drug users, illustrating the new trend of the Canadian epidemic (Archibald, Remis, Farley, & Sutherland, 1998).

Health Impacts of Injection Drug Use

The public health and social impacts of injection drug use in Canada are extensive, complex, and devastating. Individuals who develop alcohol and other drug addictions are stigmatized in Canadian society, and those individuals who inject drugs are stigmatized even further because of the illegal nature of their behavior, their chaotic lives, and their vulnerability to diseases (Health Canada, 2001).

In Canada, cocaine, heroin, and steroids are the most common drugs injected, with cocaine being the drug of choice in most Canadian communities (Topp, 1994). Several studies have found a higher risk of HIV infection among those who inject primarily cocaine (Anthony et al., 1991; Hudgins, McCusker, & Stoddard, 1995). Cocaine use by injection is of particular concern because people who inject cocaine typically do so as often as 20 times per day, which increases the problems associated with obtaining clean needles and sharing contaminated equipment (McAmmond & Associates, 1997). The major causes of death attributable to illicit drug use are drug overdose, suicide, and complications arising from HIV infection (Single, Rehm, Robson, & Truong, 2000; Single, Robson, Rehm, & Xie, 1999). Other health problems associated with or complicated by injection drug use include abscesses, infections including endocarditis, poor nutrition, adverse drug reactions, tuberculosis, and the disease and violence risks that accompany commercial sex.

Injection drug use accounts for a substantial number of deaths and hospitalizations due to complications arising from HIV infections and is also a significant risk factor in new cases of HIV infection. The proportion of reported adult HIV positive cases directly attributable to injection drug use has increased from 8.9% prior to 1995, to 28.3% in 1999, with a high of 33.8% in 1997 (Health Canada, 2001). Over one third of new HIV cases in 1999 were attributable to injection drug use (Health Canada, 2000).

Social Context of Injection Drug Use

The impact of drug use extends beyond the user; its social correlates include crime, family disintegration, child neglect, and social dependency (Gostin, Lazzarini, Jones, & Flaherty, 1997; Lurie, 1993) The social context in which at-risk populations live

has a powerful influence on risk of acquiring HIV infection. Many at-risk individuals experience marginalization, discrimination, and intolerance for their lifestyle. According to Labonte (1993), people living in high-risk situations are more likely to experience minimal social support, fewer personal support networks, low self-esteem, and low perceived personal power. The lack of social support poses a significant health risk. People experiencing psychosocial risk factors and socio-environmental risk conditions are more likely to engage in health-damaging behaviors, which reflects, in part, a stress-buffering, stress-coping strategy in the relative absence of social support or social networks. Such were the findings in a study by Mills (1997) in which the respondents engaged in high-risk behaviors including intravenous drug use, alcohol abuse, and prostitution as survival techniques to cope with their individual situations.

A variety of social factors associated with risk behaviors through injection drug use is identified in the literature. Characteristics of a disorganized lifestyle such as unstable housing, injecting outdoors, and being imprisoned are independently associated with a higher risk of HIV infection (Bruneau et al., 2001). Unstable housing is strongly associated with HIV positive serostatus (Gostin et al., 1997; Koester, 1996; Siegal et al., 1991; Strathdee, Patrick, Currie, et al., 1997). Single-room-occupancy hotel rooms are prevalent in Vancouver's poorest neighborhood and have been reported to serve as shooting galleries and contribute to the sharing of needles. Klee and Morris (1995) found three critical variables in predicting risk of sharing equipment to be the presence of an injecting partner, injecting friends, and limited access to treatment programs.

A history of having been a victim of child sexual abuse is not uncommon among both men and women who inject drugs. A review of several studies on women in alcohol

treatment facilities found that 53%-85% of women provided a history of incest or sexual abuse (Hurley, 1991). A history of neglect and/or abuse throughout childhood has been identified among individuals and their sexual partners who use injection drugs (Frankl-Howard, 1992; Medrano, Desmond, Zule, & Hatch, 1991). Adolescent survivors of sexual abuse have also been found to be at high risk of acquiring HIV infection (Allers, Benjack, White, & Roussey, 1993).

Unstable and dysfunctional family units are also associated with increased risk of substance abuse. Many youths involved in illicit drug activity may be replicating the behavior of their parents (Nurco, Blatchley, Hanlon, & O'Grady, 1999).

> The Prince Albert Seroprevalence Study, a joint research effort of the Prince Alberta Health District, Saskatchewan Health and Health Canada, reported that the 247 people who injected drugs and their sexual partners who were surveyed stated that, of the adults who raised them, 65% had problems with alcohol, 18% misused drugs and 34% had mental health problems. Sixty-three percent stated they had witnessed abuse between their parents. Fifty-eight percent lived away from home for at least one year before the age of 16. (Seymour & Mattar, 2001, p. 25)

Risk Behaviors Associated With Injection Drug Use

Intravenous drug use is an efficient means of transmitting HIV. The sharing of a syringe and needle between two or more injection drug users is the predominant behavior facilitating the transmission of HIV and is relatively common among injection drug users. A recent study in Prince Albert, Saskatchewan, found that 42.6% of injection drug users had borrowed used needles from a drug-injecting peer in the past six months (Siushansian et al., 1999). Among injection drug users recruited from the needle exchange programs in Ottawa and Quebec, 40.2% reported needle borrowing and 36.2% reported needle lending in the six months prior to the study (Hankins et al., 1999). In a 1998 study of

injection drug users from Winnipeg, Manitoba, 42% reported injecting with a needle in the last year which had been used by someone else (Elliot, Blanchard, Dawood, Beaudoin, & Dinner, 1999).

However, it would be short-sighted to assume that risk of acquiring HIV infection through injection drug use is related to only one behavior. Additional injection-related risks may occur even when injection drug users use new syringes and needles (Koester, 1996). Risk may also occur during the stages of drug preparation for injection. These practices include the shared use of water to mix the drug, the shared use of cookers or other mixing containers, and the shared use of filters through which the drug is drawn. The communal use of injection-related equipment is known as *indirect sharing* (Koester & Hoffer, 1994).

Research suggested that indirect sharing occurs more frequently among injection drug users than does sharing of needles and syringes. A 1996-1998 study of Ottawa needle exchange program attendees reported that 42% shared injection equipment other than needles in the past six months, with 20% sharing only injection paraphernalia (Leonard, Hanson, & Hotz, 1999). In a 1995 case-control study of participants of needle exchange programs in British Columbia, 69% of respondents reported indirect sharing. This behavior was higher among those who shared needles (83%) than among those who did not acknowledge borrowing needles (53%) (Strathdee & Patrick, 1997).

Current evidence indicates that the use of condoms with sexual contact reduces the rate of sexually transmitted HIV infection. Specifically, the use of condoms is recommended for individuals who have multiple sexual partners, who have a primary partner living with HIV infection, or who have a partner whose serostatus is unknown

(Davis & Weller, 1999; Pinkerton & Abramson, 1997; Surgeon General, 1993). Yet condom use remains low among injection drug users with regular and casual opposite-sex partners. Among injection drug users in Winnipeg, 68% of women and 57% of men who had had regular partners in the past year reported that they never used condoms. Approximately 30% of both men and women reported never using condoms with casual partners within the same time period (Elliott et al., 1999). According to a 1995 study conducted in Vancouver, 60% of women and 51% of men who had casual sex partners reported using condoms more than 75% of the time (Schecter et al., 1999). Nearly half of the sexually active respondents in a study of Calgary's needle exchange population reported never using condoms for a variety of reasons (Elnitsky & Abernathy, 1993).

Involvement in the sex trade poses a high risk for contracting HIV infection due to the large number of sexual contacts with a large number of potentially infected people. Many injection drug users in Canada are involved in the commercial sex trade and often engage in unprotected sexual activity. Among the clients of needle exchange programs in Ottawa and the province of Quebec, 46% of women had had sex-trade clients within the past six months. Among all sexually active female injection drug users, only 19.2% used condoms consistently (Hankins et al., 1999). In a Winnipeg study, 71.5% of female injection drug users and 30.2% of male injection drug users reported that they had ever been paid for sex. Among females, 25% used condoms inconsistently with their clients, and 52% of men reported inconsistent use with male clients (Elliott et al., 1999). Clearly, many factors influence personal decision making in the presence of injection drug use.

Context of Risk Behaviors

Influencing behavior is a challenge for all health professionals, but perhaps the greater challenge is influencing the context in which high-risk behaviors occur. Laurie and Green (2000) reported that knowledge about injection drug users' lifestyles is necessary to develop effective harm reduction strategies. The researchers interviewed clients of the Saskatoon needle exchange about their injection and sexual practices. Although sociodemographic data were generated from the interviews, it was reported in conjunction with the respondents' injection and sexual practices rather than analyzed as the foundation from which the individuals engaged in high-risk injection and sexual behaviors.

The context of injection drug use and HIV risk behavior may vary markedly in different settings and communities. Traditionally, the injection drug using population in Edmonton has been relatively isolated. As well, Edmonton has a large Aboriginal population with demonstrated mobility between the city and reserve setting, and the combination of Talwin and Ritalin has been the drug of choice in the past rather than cocaine or heroin as seen in other cities. These specific characteristics pose significant challenges in the area of HIV prevention. The need for research at the local level is critical to develop more effective HIV prevention programs that are relevant and appropriate for Edmonton and other similar communities.

Health is an experience, not a behavior. Therefore the goal of health improvement must include strategies to influence the surrounding environment, particularly the social environment for such threats as HIV (Trussler & Marchand, 1997).

The need for research describing the context in which the risk behaviors take place is strongly supported as a means to achieve greater success with HIV prevention programs (Carrier & Bolton, 1991; Freudenberg, 1990; Kane & Mason, 1992; Zwi, 1993). According to Freudenberg, a greater understanding of the context of individual behavior may help to identify and strengthen the cultural forces that support prevention, as well as challenge those that block it. For educational initiatives to be effective, we must determine the existing personal and sociocultural factors related to HIV transmission. There has been little such research in Canada (Adrien et al., 1996). There is much that remains unknown about the injection drug user and some of the factors that affect risk-taking behaviors. Studies are required that will provide understanding of the Canadian drug user and some of the social and environmental determinants that lead to injection drug use (Myers et al., 1994).

Determinants of Health

Health is affected by a complex of interrelated factors known as the determinants of health. They include a range of personal, social, biological, economic, and environmental factors that influence the health of populations. Each of these factors is important in its own right yet the factors are strongly interrelated (Health Canada Communications Directorate, 1994). The key determinants of health related to this study include the following.

Income and Social Status

There is growing evidence that higher socioeconomic status is associated with better health. In fact, these two factors seem to be the most important determinants of health. Studies in provinces and cities in all parts of Canada consistently demonstrate that

people at each step of the income scale are healthier than those on the step below. One Canadian study found that men in the top 20% income bracket live six years longer, on average, than those in the bottom 20%, and these individuals can expect to live 14 more years of life free of activity restrictions (Wilkins & Adams, 1978).

Employment and Working Conditions

Health is affected by stress-related demands of the job. Therefore, individuals with more control over their work circumstances tend to be healthier. Unemployment is associated with poorer health. A Canadian study conducted by D'Arcy (1986) found that unemployed individuals have significantly more psychological distress, anxiety, depressive symptoms, disability days, limited activity, health problems, hospitalization, and physician visits than do those who are employed.

Education

Health status increases with level of education. Education contributes to health and prosperity by equipping people with knowledge and skills required for effective problem solving and helps provide a sense of control and mastery over life circumstances. It increases opportunities for employment and income security, as well as job satisfaction. Education also improves people's ability to access and understand information to help keep them healthy.

Healthy Child Development

The way children are cared for at an early age influences their coping skills and health for the rest of their lives (Hertzman, & Weins, 1994; Johnson, & Hall, 1988). There is mounting evidence that poor prenatal care and complications at birth are linked with criminal behavior later in life and that children involved with the criminal justice

system as adults are more likely to have experienced a variety of health and social problems since early childhood (Thompson & Bland, 1993).

Social Support Networks

Support from family, friends, and communities is associated with better health. A social support network is important in helping people solve problems and deal with adversity. Family and friends help provide basic support such as food, housing, and childcare and support one another with lifestyle changes.

Physical Environment

Important aspects of the physical environment in which we live are housing, air quality, a safe water supply, and secure neighborhoods.

Personal Health Practices and Coping Skills

Our health is strongly linked to our ability to cope and to the choices we make about health behaviors. Personal behaviors such as smoking, use of alcohol and other drugs, eating habits, and coping skills, which seem to be developed in the first few years of life, are important in supporting healthy lifestyles. Effective coping skills foster self-reliance and problem-solving abilities and enable people to make informed choices that influence health. These skills help people face challenges in life in positive ways without resorting to risky behaviors such as alcohol or drug use.

Health Services

Health services, particularly those designed to promote, preserve, and protect health, contribute significantly to the health of the population. Services that educate children and adults about health risks and healthy choices support people in developing positive health practices.

Biology and Genetic Endowment

Included in the basic biology and organic composition of the human body are the genetic endowment of the individual, the functioning of various body systems, and the process of development and aging. Males and females of all ages and socioeconomic strata have different life expectancies. Genetic endowment provides an inherited predisposition to a wide range of individual responses that affect health (Health Canada, 1996).

Gender

Gender is the basis for an array of society-determined roles, personality traits, attitudes, behaviors, values and relative power that society ascribes to the two sexes on a different basis. Many health issues are a function of gender-based social status or roles. For example, women are more vulnerable to gender-based sexual or physical violence, low income, single parenthood and gender-based causes of exposure to health risks and threats (Health Canada, 2001).

Culture

Belonging to a particular race or ethnic or cultural group influences population health. The health of members of certain cultural groups such as First Nations, visible minorities and recent immigrants can be more vulnerable because of their cultural differences and contribute to perpetuation of conditions such as marginalization, stigmatization, loss or devaluation of language and culture and lack of access to culturally appropriate health care and services (Health Canada, 2001).

The determinants of health provide a framework to better understand all of the elements that can affect health. The links between socioeconomic status and health are

more than a matter of ideology and speculation. Poor housing, unemployment, lack of high school completion, and female-headed single-parent families all increase the risk of poor health. Much variation in health status can be explained by a few socioeconomic factors (Mustard & Frolich, 1995).

> Socio-economic indicators are also predictive of risk for infectious diseases including HIV infection. Scoring poorly on indicators of socio-economic risk has not only put subpopulations at greater risk for HIV infection but can also accelerate the rate at which these individuals will become sick and die after infection. Success in controlling the current wave of the epidemic will have to focus on all the social and economic factors that determine the health of these subpopulations. (Albert & Williams, 1998, pp. 97-98)

Harm-Reduction Approaches

The concept of harm reduction is difficult for many health professionals because it is rooted in socially undesirable and health-damaging behaviors. Harm reduction is a set of practical strategies that reduce negative consequences of drug use, incorporating a spectrum of strategies from safer use to managed use to abstinence. Harm-reduction strategies meet drug users 'where they're at,' addressing the conditions of use along with the use itself. It is widely recognized as an effective approach to working with injection drug users (Westermeyer, 1999).

Rather than being driven by a rigid abstinence-based model of chemical dependency, the notion of harm reduction stresses the complex, fluid, and individual nature of the user's life. Harm reduction addresses people's relationships with drugs as opposed to vilifying the individual drug user or the drug itself. Positive change is the operating principle in a harm reduction approach. Every strategy and intervention aims to enhance self-esteem and self-efficacy through incremental change by the individual. Risk

is accepted as a natural part of all lives, with harm viewed on a continuum within the context of an individual's life (Rowe & Marcotte, 1998).

Harm reduction theory suggests that behaviors and attitudes can be broken down into incremental steps in order to discover ways to minimize negative consequences (Riley, 1994). Figure 1.1 illustrates the continuum of positive, incremental change with homeless youth in the sex trade using harm reduction approaches:

Intravenous drug use	High number of anonymous or known sexual liaisons	Homeless youth in sex trade
Alternative to harmful drugs	Fewer sexual partners	Reducing influence of alcohol and drugs
Not injecting	Alternatives to penetrative sex	Supplementary sources of income
Not sharing needles	Reducing the influence of alcohol and drugs during sex	Safer location for sex trade
Cleaning needles	Use of condoms for penetrative sex	Food and shelter
Sharing needles	Unprotected penetrative sex	Turning tricks on the street

Figure 1.1. The ladder approach to harm reduction (adapted from Rowe & Marcotte, 1998).

An integral component of harm reduction is outreach work. Peers are most effective in reaching people with drug problems and are often viewed as the most credible and trustworthy people to share personal stories, seek information, and provide linkages with health, social, and addiction services.

Streetworks (see the conceptual model, Figure 1.2) is a multifaceted community-based HIV prevention program serving the street-involved injection drug users, sex-trade workers, and their sexual partners in Edmonton. The program operates in collaboration with several community-based agencies and utilizes harm reduction strategies. Services

include accessibility to new needles, condoms, a variety of nursing and health-related education, first aid, and referrals to other agencies. These services are provided through fixed sites, a mobile van, and street outreach (Wolfe & Sykes, 1992).

GOAL
- To reduce the incidence of HIV infection within the target groups

OBJECTIVES
- To increase awareness of HIV infection and its consequences
- To assist target groups in improving their own health
- To provide service users with the skills, knowledge and resources needed to initiate or maintain safer sex or safer injection practices
- To facilitate access to supports and other services as needed
- To increase the knowledge and understanding of the community with the target group

STRATEGIES
- Harm reduction philosophy and methodology
- Health education
- Health promotion
- Community development
- Advocacy
- Nursing services

PROGRAM DELIVERY MECHANISMS
- Street outreach – on foot and van
- HIV prevention offices in community agencies

SERVICES – Target Population
- Provide information and tools for safer sex and safer injection practices
- Counseling as requested
- Program involvement of service users
- Health education
- Health protection, diagnostics, minor treatments
- Connection of service users with mainstream health and social supports and resources
- Advocacy as required

SERVICES – Community
- Increase knowledge and understanding among community agencies, organizations and individuals around target population and harm reduction
- Explore and initiate action with partners

Figure 1.2. Conceptual model of Streetworks (adapted from Alberta Health, 1996).

In 1995, Streetworks reported 16,525 contacts with clients, and approximately 400,000 needles were exchanged (Albert Health, 1996). But despite the documented successes with the current program, the need for additional harm reduction strategies is demonstrated by the rising incidence of HIV infection among the drug-using population in Edmonton.

Theories of Health Behavior Change

The emergence of health promotion as a key global strategy for improving health has resulted in a shift in the definition of health in traditional medical terms to a broader and much more interesting phenomenon with bio-psychosocial, spiritual, environmental, and cultural dimensions. Health promotion is defined as, "the process of enabling people to increase control over the determinants of health and thereby improve their health" (Ottawa Charter for Health Promotion, 1986).Various behavioral theories and models were applied to a wide range of health behaviors to determine whether they could be predicted or whether the underlying motivational mechanisms could be explained (Pender, 1996). Theory is "a creative and rigorous structuring of ideas that project a tentative, purposeful, and systematic view of phenomena" (Chinn & Kramer, 1995, p. 72). Theories can interrelate concepts in such a way as to create a different way of looking at a particular phenomenon as well as contribute to and assist in increasing the general body of knowledge through research (Torres, 1986). Two behavioral theories are relevant to the findings of this study.

The Theory of Planned Behavior

Theoretical approaches that have been shown effective in modifying risk intentions and behaviors include the theory of reasoned action/planned behavior

(Fishbein, 1998). The theory of reasoned action is particularly useful when describing behaviors that were totally under volitional control. However, most behaviors fall somewhere along a continuum that ranges from total control to complete lack of control. An individual has total control when there are no constraints to the adoption of a specific behavior. The theory of planned behavior extends beyond the theory of reasoned action by including the concept of perceived behavioral control. At the opposite extreme, an individual has a complete lack of control if the necessary opportunities, resources, and/or skills to adopt a behavior are lacking. To account for such barriers, real or perceived, a third concept of perceived behavioral control was added to the original model (Godin, 1994). A simplified model of the theory of planned behavior is presented in Figure 1.3:

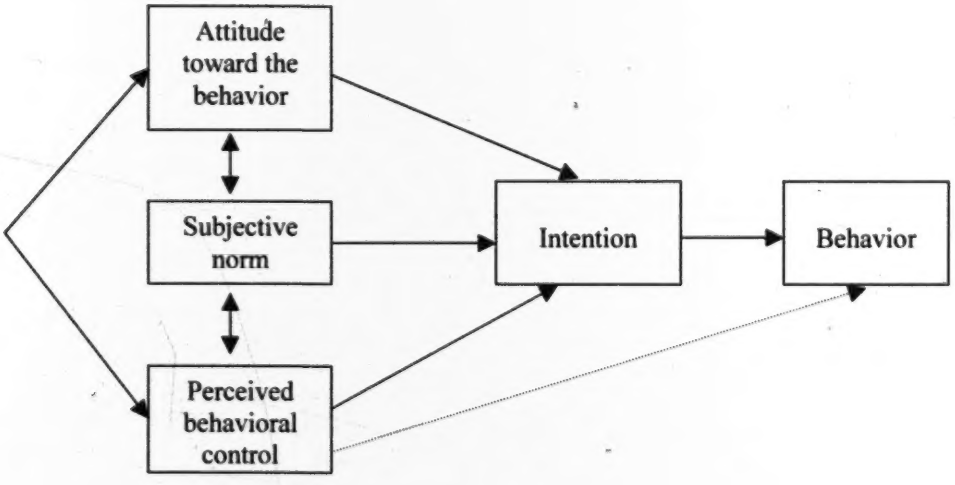

Figure 1.3. Theory of planned behavior (adapted from McKenzie & Smeltzer, 1997)

Health Belief Model

The health belief model was developed to provide a framework for understanding why some people take specific actions to avoid illness, whereas others are unable to protect themselves. At the time of development, both the public and private health sectors were concerned that people were reluctant to be screened for tuberculosis, to have regular Pap smears, or to take other preventive measures that were free or available at a nominal cost. This model was designed to predict which people would and which people would not use preventive measures and to suggest interventions that might address client reluctance toward health promoting behaviors (Padilla & Bulcavage, 1991; Salazar, 1991).

The health belief model suggests that adoption of some preventive behaviors as a means of reducing the risk of contracting HIV infection through injection drug use is related in part to the constructs of the model: (a) perceived susceptibility to be affected by the target condition, (b) perceived seriousness of the impact of the target condition; (c) perceived benefits to avoiding the target condition; and (d) perceived barriers to avoiding the impact of the target condition. The perceived barrier construct has been consistently identified as the variable which is most influential in determining health behaviors (Melnyk, 1988). An illustration of the health belief model is presented in Figure 1.4.

The health belief model is beneficial in assessing health promotion and disease protection behaviors. The model provides organized assessment data about clients' abilities and motivation to change their health status. The fundamental assumption of this model is that an individual's ability to take personal action against a health threat is based

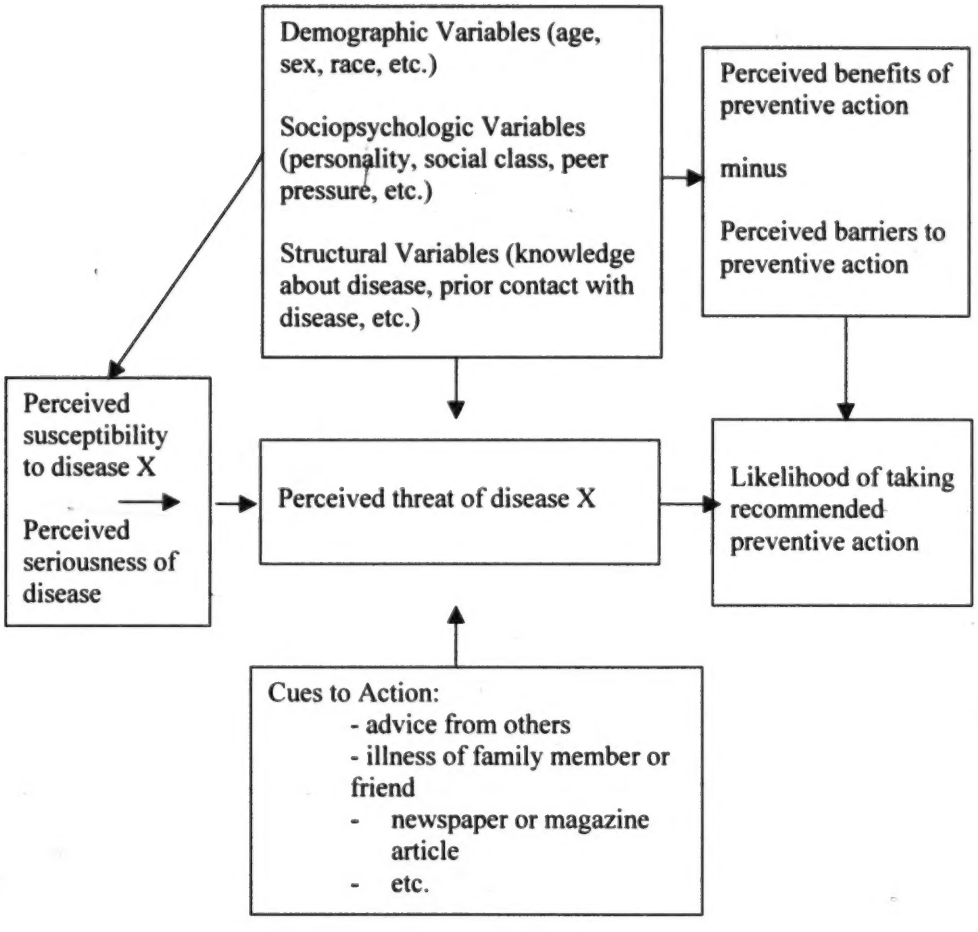
Demographic Variables (age, sex, race, etc.)
Sociopsychologic Variables (personality, social class, peer pressure, etc.)
Structural Variables (knowledge about disease, prior contact with disease, etc.)
Perceived benefits of preventive action
minus
Perceived barriers to preventive action
Perceived susceptibility to disease X
Perceived seriousness of disease
Perceived threat of disease X
Likelihood of taking recommended preventive action
Cues to Action:
- advice from others
- illness of family member or friend
- newspaper or magazine article
- etc.

Figure 1.4. Health belief model (adapted from Pender, 1996).

on his or her perceived susceptibility to the impact of the threat or illness and its perceived severity.

The literature related to HIV prevention focused on the identification of population groupings and specific behaviors that increase the risk of HIV infection. The

health belief model plays a valuable role in the development and evaluation of programs that are based on motivations that account for preventive health actions (Ferrini, Edelstein, & Barrett-Connor, 1994; Norman, 1995; Wells, McDiarmis, & Bayatpour, 1990). Data from the personal interviews will be examined in relation to the behavioral theories in an effort to better understand the participant's lived experience. Implications for practice will be identified to augment HIV prevention strategies.

Summary

Determining risk factors for HIV infection can assist researchers in developing appropriate models to address the epidemic, as well as assist in prevention programs in decreasing further transmission (Friedman, Jose, Deren, Des Jarlais, & Neaigus, 1995). In the midst of exploring the obvious linkages between injection drug use and HIV transmission, it is important to consider the social and contextual factors that may be directly or indirectly related to viral transmission and which could provide important insights to guide prevention measures.

CHAPTER THREE

RESEARCH METHODOLOGY

Introduction

In this chapter the selection of the sample population is described. The various methods used to collect the data are outlined, and the ethical considerations of this study are presented. There is a description of methods used for analysis and verification of the analysis. The chapter concludes with a description of methods used to disseminate the findings of the study.

Research Design

The nature of the research question determines the most appropriate design. Qualitative inquiry is particularly useful in answering questions about what an experience is like for an individual. This approach is the preferred method when little is known about a phenomenon or when the goal is to explore issues from the insider's perspective (Morse & Field, 1995). The purpose of this study was to explore the life experiences of injection drug users in Edmonton who had seroconverted within the past two years. The decision to choose qualitative methodology was based on the premise that, despite extensive research related to injection drug practices, little is known about the context in which injection drug use occurs.

Given the complexity of injection drug use and the contextual factors which influence the risk for HIV infection, several approaches to research design and practice were used to complete this study. First, a narrative approach to interviewing and analysis was used because this method assumes that people live "storied lives" and seeks to collect data to describe those lives. The researcher collaboratively constructs the

narrator's reality rather than just passively recording and reporting. (Marshall & Rossman, 1995). Narrative analysis is based on the premise that individuals use story telling as a means of making sense of their experiences (Roth & Nelson, 1997).

Second, an ethnographic approach was incorporated in the interviewing and analysis process. "The value of the ethnographic interview lies in its focus on culture through the participant's perspective and through firsthand encounter. This approach is especially useful for eliciting participant meanings for events and behaviors" (Marshall & Rossman, 1995, p. 82).

Sample

Interview participants were comprised of a purposeful convenience sample of individuals living with HIV who are injection drug users and who volunteered to participate in the study. I initially estimated that eight individuals would be interviewed; however, an additional two individuals were selected according to the specific informational needs of the study. For example, one individual had experienced a pregnancy after being diagnosed with HIV, and I felt that it was important to understand that experience. The other individual was the spouse of one of the participants, and I believed that comparing their perspectives might be informative.

I met with staff at the HIV Outpatient Clinic at the University of Alberta Hospital and Living Positive, a community agency for persons living with HIV infection. I reviewed the intent of the proposed research and requested their assistance with the recruitment process. I provided a Guide for Recruitment (see Appendix A) as reference material to help identify individuals to participate in the research and answer questions about the study.

Selection criteria for inclusion in the study were (a) mental competency and proficiency with speaking and understanding the English language, (b) documented seroconversion or laboratory evidence of HIV acquisition within the past two years, (c) living in northern Alberta during the period when seroconversion was thought to have occurred, (d) using injection drugs during the period in which seroconversion was thought to have occurred, (e) primarily resident in Edmonton, and (f) representation of both women and men.

An Information Letter for Participants (see Appendix B) was also provided to potential respondents by the agency staff in an effort to help answer specific questions and concerns related to the study. To my knowledge, none of the respondents contacted any of the individuals identified in the Information Letter with questions or concerns about the study.

Delimitations of the Study

Only participants who met the established criteria were approached as part of the recruitment strategy for this study. Although other clients of the HIV Outpatient Clinic at the University Hospital are currently injection drug users, they were not injection drug users at the time seroconversion is thought to have occurred. One individual who expressed interest in participating in the study was not living in Alberta at the time of seroconversion. Therefore, these individuals were excluded from the study.

Data Collection

Interviews

The primary collection method was semistructured interviews with some open-ended questions (see Appendix D). Personal interviews were crucial to this study because

they allowed participants to report their experiences and perceptions. Using the determinants of health as a framework, the interview guide was designed to include sections related to demographics, child development, income and social status, physical environment, social support networks, personal health practices and coping skills, condom use, HIV diagnosis, and health services. Semistructured interviews ensured that the respondents were asked the same questions but still allowed the respondents the flexibility to tell their stories in ways that were comfortable and meaningful for them.

Eight participants were approached by a social worker from the HIV Outpatient Clinic at University of Alberta Hospital or the director of Living Positive. They provided a brief outline of the parameters of the study to the individuals, emphasizing the confidential and voluntary nature of the interview and the subsequent use of the data. Participation was determined through self-selection.

The interview guide was pretested with two participants who met the criteria for the study. The intent of the pretest was to assess the clarity of the questions, the flow of the interview, and the time required to complete the interview. Using the Determinants of Health as a framework, I designed the interview guide to begin with the least threatening questions and gradually move toward more personal and sensitive questions. For example, I began with requesting information related to demographics such as age, gender, and marital status which are easy questions to answer. Over the course of an hour, my questions shifted into the area of personal health practices and coping skills, and the questions became much more sensitive in nature.

I had not anticipated the complexity of the question, "How old were you when you left home?" For most participants this was a difficult question to answer due to a

chaotic and/or abusive home environment. A common response to this question was, "Which time?" Between intermittent placements in foster homes and running away, many respondents 'left home' more than once. By asking about the last time the individual 'left home,' I risked missing pertinent data related to their childhood experiences. The interview questions were revised based on the feedback from the participants to better reflect the health determinant "healthy child development"(see Appendix E). The revised interview guide was pretested to assess the results of the modifications. I was then satisfied with the flow of the interview and the quality of the data generated. I used the revised interview guide with the following seven interviews.

All the interviews were conducted either at the HIV Outpatient Clinic at the University of Alberta Hospital or Living Positive, with two exceptions. One respondent, a single mother of a ten-month-old child and without access to transportation, requested that the interview take place in her home. Once I was certain our privacy would be maintained, I agreed to visit her in her home. The interview was uneventful.

The other individual was an in-patient at the University of Alberta Hospital at the time of the interview. Although he had contracted HIV infection a few years ago through injection drug use, he had received his positive test results during this hospital admission. The participant was very receptive to sharing his story with me, however, I found it difficult to conduct the interview because of the setting. The interview was carried out over three visits due to the timing of various nursing interventions and medical procedures.

Each respondent was given the Information Letter for Participants (Appendix B) earlier as part of their recruitment; however, only one participant had read the letter prior

to meeting with me. I encouraged the participants to read the letter, followed by a consent form to sign (Appendix C) before the interview began. All the interviews were audiotape recorded with the respondents' explicit verbal consent. Although I tried to limit writing notes during the interviews, I found many of the participant's lives extremely complex, and I had some difficulty following the events as they unfolded. Few stories were told in a chronological format so I found it helpful to create a timeline to sort out the details. Each in-depth interview was later transcribed verbatim either by a professional transcriptionist or myself. All interviews transcribed by the transcriptionist were reviewed and assessed for accuracy.

Fieldnotes

Fieldnotes are written descriptions of what the researcher sees, thinks, or hears during the data collection and analysis process. They should supplement audiotape-recorded interviews as additional data (Morse & Field, 1995). Contextual information about each interview such as the setting and participant's nonverbal communication as well as my subjective views were recorded in field notes and a journal, respectively.

Ethical Considerations

Several strategies were used to protect the rights of the individuals who agreed to participate in this study. This qualitative research was approved by the Health Research Ethics Board (B) at the University of Alberta. Letters of support from the HIV Outpatient Clinic at the University of Alberta Hospital and the Sexually Transmitted Disease Centre accompanied the documentation for ethical approval. Recruitment was initiated by staff at the HIV Outpatient Clinic to ensure no breach of confidentiality without the client's permission. Staff members emphasized the voluntary nature of the study and informed

each client that his or her care would not be jeopardized if the individual chose not to participate. Informed written consent was obtained prior to initiating the interview. Respondents were informed that they were free to refuse to answer specific questions or withdraw from the study at any time. I am confident that the respondents felt that I was genuine regarding the parameters of the study because one participant did refuse to answer a question related to her first sexual experience. She was visibly distressed with the question, and I did not pursue it with her. Arrangements were made to have a psychologist from the HIV program available for counseling if the telling of personal stories triggered emotional issues for the respondent. An honorarium of $20.00 was provided to each participant.

Data Analysis

Content analysis is the process of identifying, coding, and categorizing primary patterns or themes in the data (Patton, 1990). This process was used to analyze the data with the intent to understand the themes. The first step in analysis was to comprehend the data. In an effort to manage the amount of data within each lengthy transcript, I listened to the audiotapes and underlined key phrases. Once I captured the general concepts from the interview, I followed up with a line-by-line textual analysis of each transcript to code the data. Coding involved using concepts to label words or phrases (Boyle, 1994). Codes from each transcript were copied onto flipchart paper and taped on a wall so I could visually compare codes. As themes began to emerge, I compared them with the general concepts I had documented earlier from listening to the tapes. The codes were sorted once again and copied under the appropriate thematic heading. Relevant interview text

from each participant was incorporated under the appropriate heading using the traditional cut-and-paste method.

According to Miles and Huberman (1994), check-coding assists in clarifying code definitions as well as being a good reliability check. A colleague reviewed one of the interview transcripts and developed codes for the interview text. I compared this set of codes with the set that I had developed to ensure reliability with my analysis. Using the formula developed by Miles and Huberman, the intercoder reliability was assessed at 94%.

Methods of Verification

Triangulation is the process of bringing more than one source of data to bear on a single problem. Data from a variety of sources can be used to corroborate, elaborate, or illuminate the research in question (Rossman & Wilson, 1985).

The collection of data from each in-depth interview was augmented by the data recorded in field notes and a personal journal by the researcher. Field notes recorded the activities and behaviors of the participants during the interview. These notes provided the necessary context for each participant's response resulting in a deeper understanding of the data generated. As well, an additional interview was conducted with a spouse of one participant in an effort to compare their perspectives based on a shared experience.

Research Standards

Credibility

Credibility is the valid representation of the subject as perceived by the participants. In qualitative research, the goal of credibility is to ensure that the inquiry is conducted in such a manner that the subject is accurately identified and described. The inquiry then must be "credible to the constructors of the original multiple realities" (Lincoln & Guba, 1985, p. 296).

A number of strategies were used to ensure credibility. A semistructured interview format with some open-ended questions was used so participants had the opportunity to share information and experiences that were important and relevant from their perspective. Although there was a systematic design to my questions, participants told their stories as they recalled their experiences, and I found it difficult on occasion to follow the sequence and detail of the events. I asked for clarification a number of times to ensure that I was able to capture the data accurately. Other measures employed to ensure the credibility of the data included audiotaped recording of the interviews and checking transcripts for accuracy.

Informed Consent

Each participant was informed of the purpose of the study, the process, and the time commitment prior to signing a written consent form (see Appendix C). Individuals were invited but not pressured or coerced to participate in the study. It was clearly explained that they could stop the interview at any time and that they could refuse to answer specific questions. As well, participants were informed that involvement in this

study was not related to the care or service they received from health practitioners at the HIV Outpatient Clinic or from staff at Living Positive.

Participants were asked if they had any questions or concerns about the study both before and after the interview. No personal concerns about the study were raised by the participants, but a few individuals were curious about the research process. They asked questions such as "What are you going to do with all these interviews after you talk to us?" "Is anybody helping you to pay for this?" and "Do you want me to find some other people for you to talk to?"

Confidentiality

Participants were reassured that their identity would remain confidential. Only my thesis supervisors and I would have access to the raw interview data. Although the transcriptionist had access to the audiotapes, I did not use surnames during the interview. All material related to this study was kept in a secure filing cabinet in a locked office when not being used. All signed documents including individual consent forms and receipts for honoraria were stored in a separate locked cabinet. Audiotapes, transcripts, fieldnotes, consent forms, receipts for honoraria, and my personal journal will be destroyed after five years as required by the Faculty of Graduate Studies and Research guidelines.

Anonymity

The identity of the participants was known only to the staff involved in the recruiting process and me. The audiotapes were labeled using first names only. Excerpts from the transcripts are used in the reporting of results, and the individual is identified by a single letter.

Risks and Benefits

Given the very strict measures taken to protect confidentiality, the only anticipated risk associated with the study was the possibility of psychological distress triggered by the topics discussed. As mentioned previously, arrangements were made for a psychologist to be available for follow-up with individual participants if necessary.

The majority of participants wanted to know if the results of the study would be shared with them. I offered to provide a written summary of the study results to each participant, and all but one individual wanted to receive a copy. Given that the participants may not have been living at their current addresses by the time the summary was prepared, I made arrangements to have the documentation distributed by the same staff members involved in the recruiting process. I discussed this option with each respondent, and all of them supported the process.

Dissemination

Besides reporting the results of this study in a master's thesis, a summary of the findings will be provided to the participants of the study and the staff of the HIV Outpatient Clinic. As well, a fact sheet will be developed highlighting the implications for programs and services. The fact sheet will be distributed to local community groups and agencies serving individuals at risk for contracting HIV, AIDS service organizations, and funding agencies. Submissions will also be made to relevant academic journals for publication.

Summary

A description of the research methodology has been presented in this chapter. The selection of the sample population is outlined, and the recruitment procedure is described. Data-collection methods utilized in this study included personal interviews, fieldnotes, and observation. A description of the methods used for analysis and verification is provided.

CHAPTER FOUR

RESULTS

Introduction

This chapter summarizes the key findings of the study. Using the determinants of health as a framework, the content is organized within specific categories including demographics, child development, income and social status, physical and social environment, social support networks, personal health practices and coping skills, and health services.

Demographic Characteristics

A total of 10 individuals were interviewed for this study; 5 women and 5 men. The age of the respondents ranged between 18 and 52 years. Respondents comprised three main ethnic groupings: Four were Aboriginal, three were Caucasian, two were Métis, and one individual described herself as Mulatto. All respondents had completed some junior high school, and the majority had completed some high school. Three of the respondents had completed Grade 12, but none of the individuals had initiated postsecondary education. The respondents' place of birth varied from small towns to large cities, including Edmonton. One individual was born out of country, but his family relocated to Canada when he was a small child. None of the respondents were born in a reserve setting.

The majority of respondents were single, with two being married at the time of the interview and one previously divorced. Eight respondents were parents of at least one child, but only one respondent reported that a child currently lived with her. The majority

of children were in care of relatives or social services. A profile of the study participants is provided in Table 1.1.

Table 1.1

Profile of the Study Participants

	Age	Sex	Grade completed	Marital status	# of children
A	28	male	9	single	5
B	52	male	9	divorced	1
C	29	female	11	single	3
D	31	male	12	single	1
E	32	female	10	single	1
F	34	female	7	married	1
G	18	female	10	single	0
H	38	male	12	married	4
I	41	male	12	single	0
J	22	female	8	single	2

Healthy Child Development

Only 1 of the 10 participants grew up in a stable, intact home. The remainder came from families fraught with divorce, substance addiction, abuse, and/or neglect. Seven of the participants' parents divorced, and one participant never knew his father. Participant D said, *"No, no dad at all. All three of us have different fathers, in fact, and*

just one mother." For most participants, their chaotic home environment began at birth, followed by a high degree of mobility during their early years. Participant C described a violent father as the cause of her apprehension by social services at birth:

> *I was in four or five foster homes 'til I was seven years old. My parents were heavily into alcohol, and he was really abusive with her [mother] physically. She was in the hospital pregnant with me just so she could keep pregnant with me; that's how badly she was beaten. Social services came and got me after I was born because he was really mean.*

As a result of an unstable home environment, eight of the participants had extensive experience with the child welfare system during their early years. They were typically placed in many different foster homes rather than one relatively stable home.

> [Tell me what it was like growing up.]
>
> *I was back and forth in homes, homes most of my life, from foster homes to group homes to jail. Back and forth, back and forth. I was always in trouble. I went out on my own for good when I was about eleven or twelve. I went to a friend's place, my grandma's, on the street. All over the place. (Participant A)*
>
> *I was adopted twice. And then I was in foster homes, and I was in institutions lots. So everybody raised me. (Participant G)*

Some of the participants did not have a clear understanding of the reasons for this repeated uprooting. Information about their birth families was limited, and participants explained that they did not know who to call for more detail. One reason for this high degree of mobility is related to efforts by social services to retain the family unit. Children were often removed from the home while the custodial parent received external support for his or her own issues. The two primary issues identified by the participants of this study are substance abuse and domestic violence. One individual's story illustrates the impact of her mother's alcoholism:

From the time of birth 'til the age of almost four I was placed in six different homes. My mom was at a stage in her life when she was going on liquor, off liquor. Mom and Dad would get back together, break up, and I would go back and forth.

Regardless of the reasons for being in care, there was a strong sense of abandonment in their personal stories. One individual described feelings of abandonment many times, beginning with her birth as well as her experiences with foster homes and adoption:

My mom gave me up as a child [newborn]. I guess she couldn't take care of me. I went to a foster home until I was one and then I got adopted. I stayed there for a year and a half and then I got abandoned by them because I wouldn't gain weight. And then I went into foster homes again.

Parental substance abuse was frequently identified as a key factor within unstable family units. Six of the participants reported alcoholism with one or both parents:

Our parents would always be drinking and stuff. They were never there, and we'd go out and do whatever. (Participant A)

I was put in care. It turned out that her [mother] and my father were heavily into alcohol. (Participant C)

It was just all drinking. My mom would pay the rent, buy food, and take off for the month. Partying, bars. . . . They'd go out bar hopping, and then we'd be running around the streets at one or two in the morning. (Participant H)

Participants also had to deal with other forms of family dysfunction. One participant left home because she could no longer tolerate watching the domestic violence:

I had an excellent home. Excellent. But I watched my mom get beaten up lots. Put the kids in the closet so they didn't hear her get beaten. He threw me one time, and my mom went up and tried to help me. He threw her and he gave her a really bad beating for getting involved. And after he was done he wouldn't really hurt us as bad as he hurt her. He told me if I told any school teachers, he'd kill my mom. She kicked him out, got a restraining order, got a peace bond. Then took us away.

She left when I was around fourteen, and fourteen is when I rebelled. I was sick of the abuse, sick of watching it. I started working the streets. (Participant J)

Each participant was asked about his or her experience with physical, sexual, and emotional abuse during their childhood. One male respondent experienced sexual abuse on two occasions. Once, while living with his birth family, a stranger approached him on the street and began to fondle him in a car. When the perpetrator discovered that he was not a girl, he threw him out of the car. This participant confided that he felt fortunate that he was not a girl at the time of this incident. This same individual experienced sexual abuse while in a youth detention centre. Another resident of the centre attempted penetrative anal intercourse one night, but the participant was able to summon assistance by screaming.

Every female participant interviewed for this study had extensive experience with physical, emotional, and sexual abuse:

The real early stuff I don't remember, but from what I've heard from my mom, it was pretty bad for a toddler. After I went into my adopted home, things were good for a while there, but then the sexual abuse started happening by my brothers; there was three brothers in that family. (Participant C)

During my upbringing at the [foster] home, I was mentally, physically, sexually, and emotionally abused. I received a whipping with an extension cord one time, so I decided to run away. (Participant E)

My adoptive parents were abusive. It got to the point where I was getting lickings left and right, and some things that I didn't do, I still got into trouble for. My butt was bruised up most of the time until I started turning on them and started to rebel against them, and I started smoking. My adoptive mother told me I was going to get the beating of my life when my adoptive father came back. I freaked and ran away. I was about ten or eleven. (Participant F)

I was mentally abused in one foster home. They'd lock me up in my room and then tell me every time to go to the bathroom to bang on the door, and I'd bang on the door, and then they wouldn't answer, and I'd end up peeing on the rug. And then they'd come and beat me with a belt and then rub my face in my pee and say "Bad girl" and stuff like that. (Participant G)

When we'd help my mom, he'd go after us. He threw me one time, and my mom went up and tried to help me, and he threw her, and he gave her a really bad beating for getting involved. And after he was done he wouldn't really hurt us as bad as he would hurt her. He told me if I told any school teachers, he'd kill my mom. (Participant J)

One male participant adamantly denied personal experience with abuse; but, at the same time, he provided detailed illustrations of parental neglect:

It was a dysfunctional family. My dad went to jail [when I was] about six years old, and then my mom started messing around with other men. They'd go out bar hopping, or my mom would go to bingo. They'd see us running around the streets at one or two in the morning, and I'm sure someone complained. Plus we wouldn't go to school and the school board would complain. That's when I started sniffing [solvents]. I was about seven years old.

The age of first sexual experience for the participants of this study ranged between 5 and 21 years. Seven of the 10 participants had their first sexual experience by the age of 14. Three of the five women interviewed described their first sexual experience as nonconsensual, traumatic, and abusive in nature. This event occurred when they were ages five, seven, and five, respectively. A fourth woman became visibly upset when the question was posed, and she was unable to talk about it.

When I was five years old. I remember this old man used to take me for ice cream from the foster home all the time. I don't know if he was my grandfather or if he was an uncle or who the fuck he was. But he used to make me jerk him off in the car all the time. That pig. I remember doing that. I remember the smell of his car and everything. A yucky old man. (Participant C)

I guess I must have been about seven. It was the same guy who helped me run away from the foster home. There was a couple of farmers who used to own some land back behind our place, and they were bachelors. The older fellow used to take a real liking to me, and so he was the one who helped me get away. I don't think I felt anything, because I think I numbed it out; I think I just blocked it out. (Participant E)

I was raped when I was five by our babysitter my mom left in charge of us. You never forget it. (Participant F)

Income and Social Status

All respondents with the exception of one were receiving social assistance at the time of the interview. The individual not receiving social assistance had recently left the sex trade, and she did not have any source of income. Each individual reported an annual income of less than $12,000, with four individuals receiving $5,000 or less per annum. One individual was employed on a seasonal basis, but he received medical benefits through social services.

There were significant gender differences in the response to coping mechanisms when short of cash. The male respondents reported a variety of strategies that included general labor such as janitorial work, fronting a dope deal, picking bottles, or borrowing from family members. It is interesting to note that the participants implied a sort of etiquette with the strategies they identified, as well as a breach of etiquette with other options.

> [What do you do when you run out of money?]
>
> *I've thought of mugging people; I've walked around with an open-bladed knife in my pocket. Maybe it's my upbringing; maybe it's my attitude. I'm a bloody snob. I have got no qualms about selling drugs. I have no qualms about picking up a wallet, finding it full of ID, taking the cash, and throwing the wallet in a dumpster. I've got no qualms about doing a lot of things, but there's a line. (Participant B)*
>
> *I can middleman a bag of pot here and there. It's not like I'm out there trafficking, you know what I mean? (Participant D)*

One individual could not describe a solution if he found himself short of cash: *Borrowing money is out of the question. There's nobody that has money to lend. I guess I would go hungry. I haven't had that problem yet.*

All female respondents except one reported that they resorted to prostitution when financially strapped. The one exception reported that she had not yet experienced being completely broke. It is also important to note that none of the women had ever been employed in any field other than prostitution.

[What do you do when you run out of money?]

Sometimes I phone an old regular, you know what I mean? An old trick. I have a couple of regulars I see once a month or whatever. (Participant C)

There would be times when the welfare cheque didn't quite reach the end of the month; there would be a week left and I would be low on groceries. Or money for the coin laundry or how am I going to get [son] to school? So I found out what I could do was go stand on the street corner and make up the money that was needed for the next day. This became a really handy tool for me because this is what I started doing full-time basically in order to get my drugs and alcohol. (Participant E)

Some days I can accept being broke, and some days I can't stand it. And when I run out of money, I sometimes relapse and go back to the streets. There's always money from there. (Participant G)

One woman outlined a particularly dangerous strategy in which she would rob her clients. She related that she would get into a trick's car and proceed to rob him before fleeing. The woman acknowledged the inherent danger of her actions but explained that she always had something with which to protect herself [a knife]. She also described other creative options such as calling her mother and lying to her about needing money for something else. Her mother would then buy her new clothes, and she would return them to the store for a cash refund.

Physical and Social Environment

The data related to the health determinant 'physical and social environment' is organized into four themes, including accommodation, food security, experience with the criminal justice system, and social support networks.

A. Accommodation

Most respondents reported a relatively stable living situation. The length of time at their current residence ranged from one month to two-and-one-half years. Most of the individuals who reported living in their current residence for only one or two months had been living in their previous residence for more than one year.

In terms of the nature of their accommodation, four respondents reported living in an apartment and four reported sharing a house with others. One respondent was living in a shelter since leaving the streets, and the other reported living in a downtown hotel. Most respondents were satisfied with their current living arrangement. Some of the factors that led to a positive living situation included a safe and quiet setting, an all-inclusive room-and-board arrangement, and compatible roommates.

Despite a relatively secure living arrangement, two respondents were unhappy with their place of residence. Their reasons included loud, unruly neighbors and the location of their residence: They were far from their circle of friends.

> *I want to get out of the Cockroach Hotel. I want to get out of a drunk keeping me awake at three o'clock in the morning. The other night I went to bed at nine-thirty or ten o'clock; I'm still wide awake at eight o'clock the next morning, and I hadn't used, because you've got this drunk who won't turn his TV off. (Participant B)*

> *I have a bedroom in a house on the south side. I share the bathroom and the kitchen and laundry room. I'm barely there. I don't like it there, because it's far away from where my friends are and my supports are. So when I need them on the weekends or something, I can't just—I could hop the LRT, yes, and whatever and come and see them, but it's far, you know? (Participant G)*

B. Food Security

When asked about access to food and nutrition, most respondents reported that they were able to get enough to eat and they were satisfied with the availability of foodstuffs. However, further probing identified some incongruence between the notion of getting enough to eat and appropriate access to food and nutrition. Only two participants reported purchasing foodstuffs at a local supermarket on a regular basis.

[Do you feel you get enough to eat?]

[Where do you get your food?]

Oh yes, yes. That's not a problem. Edmonton supplies people with lots to eat. You've got the food banks, you've got the soup lines, places to go and eat like the single men's hostel. (Participant A)

Oh yes, we got lots to eat. Sometimes we don't really feel like it if we're busy cranking, but otherwise we're doing really good. We go to food banks. On cheque day, we go to Safeway. Or my family doctor gives me Ensures and [husband] gets Ensures, so we combine our Ensures and live on that. (Participant F)

C. Experience With the Criminal Justice System

Eight of the 10 participants in this study had personal experience with the criminal justice system. The number of incarcerations for an individual ranged from one isolated incident to "more than I can remember." Convictions ranged from simple break-and-enter charges to armed robbery and assault with a weapon. Four of the eight participants with a criminal record began their careers as young offenders.

[Tell me about your experiences with jail.]

I was sent to the Edmonton Young Offenders Centre in Clareview first. I went from there to Kikano Hall, which is in Edmonton, a secure wing for young offenders. And from there I was TA—temporary absent—to a group home. Then I started going into adult facilities. (Participant D)

I was in lots of trouble early on. When I turned eighteen I was in Remand. I did two years on and off. We were up on a robbery with violence beef. I was in and out because I kept screwing up with my bail. The last time was in '98, just before my baby was born. They only kept me a few days because they didn't want me going into labor in there, so they let me loose. I was in maybe six or seven times in between. (Participant F)

I was put in [young offenders centre] when I was nine years old, from nine to twelve, for doing two hundred and fifty thousand dollars' worth of damage to a school. They put me in [children's detention centre] twelve times before that. Then I graduated to Edmonton [youth detention centre] here and then the big house [Remand]. Petty shoplifting, B and E's [break and enter], stole a gun, and robberies I moved up to. The worst was attempted murder, aggravated assault. (Participant H)

I was accused of armed robbery. I was thirteen and did eight months. I've been in and out maybe five times. Breaches and solicitings, prostitution, failure to appear [in court]. (Participant J)

Experience with incarceration is commonplace with the participants of this study and their social support network. One woman denied having been in jail, although she had been heavily involved in trafficking cocaine, heroin, and speed and worked as a prostitute for many years. This participant spoke with pride as she talked about having avoided a criminal record:

No jail time. I managed to skip having a criminal record; I don't know how I did it. Lots want to know. My brothers and sisters want to know if I have a conspiracy going with the police department in Edmonton. I don't know; it's just like, why me? Very lucky.

Injection Drug Use in Jail

Of the eight participants who had experienced the criminal justice system, only one person had injected while incarcerated. Personal reasons for not injecting included not wanting to share a needle with other inmates, not being an injection drug user at the time of incarceration, knowing there would not be enough drugs to continue injecting, and not being able to find a needle.

[Did you inject in jail?]

No, never did. Smoke up, that's about is, but not needles. I had a chance to, but the guys were all sharing the needle so I just said, "No thanks." (Participant A)

No, no. It wasn't my forte at the time. I was more into weed, pills, anything that didn't hurt. I was exposed to a lot more pills, a lot more opiates, mood-altering shit, muscle relaxants, morphine, stuff like that. (Participant D)

No. I could have, but I didn't, because one shot's not enough and I'd go nuts if I couldn't have another. (Participant F)

No. I smoked crack in jail. We couldn't find no needles; we didn't find no diabetics there. You need to find a diabetic in there, and then they inject themselves, they stick the needle in their pocket, they hand it to us, we clean it out. (Participant J)

The one individual who injected while incarcerated did not find access to drugs problematic, but he did find access to needles challenging:

I injected peelers [MS Contin—a sustained-release, 'natural' morphine]. We had a friend who had a connection. Everybody knows how to get everything in there. There's biker crowds; you have different groups. You have your Vietnamese, you have your bikers, you have your coloreds, you have your Frenchmen, and everybody knows how. No wonder everybody catches AIDS in there, because they pass around a needle like crazy. But we bleached it, eh?

This individual denied ever having his needles taken away from him by prison staff. He explained that he never carried a needle while in prison. The needles he used were someone else's property, and he paid to use them. This appears to be common practice in the prison setting.

D. Social Support Networks

The majority of respondents reported that they had someone within their social network to whom they could turn for physical or emotional support when needed. Some individuals described their street-involved network as a 'community' or a 'big extended family':

We're brothers, like one big street family. We help each other. We look out for each other, man. It's not, "You owe me this, you owe me that." If I have it, they have it; if they have it, I have it. We talk to each other. They [friends] get depressed and they try and cut their wrists or they try and hang themselves. And I sit there and talk with them for maybe whatever, how long it takes. I was brought up downtown all my life, so they're [friends] all users or alcoholics. I think that's why they get depressed. (Participant A)

I was really involved with other working girls on the street and guys who were into the same scene. I think back on it now, hanging out with these people, and for the first time in my life I think I felt like I actually belonged somewhere and like I actually fit in and I was accepted. I was making up to a thousand to fifteen hundred dollars a night just selling my body so I could buy other people drugs as well as myself because I wanted to have friends. (Participant E)

I don't have any blood-related people in my life; they're all street-related. A lot of people. I have lots of mom and dads. I have two dads, a couple of moms, a lot of brothers and sisters, a few uncles, a few aunts. People I met on the street, met through Living Positive. (Participant G)

Others described members of their birth family or friends as their main source of support. Two individuals described themselves as socially isolated with little support:

Talk to? Nobody. As far as my emotional state, I pretty well look after myself. My best friend got engaged to my girlfriend while I was in hospital, so we're not very close any more. (Participant I)

My closest friend? I have none. I don't trust nobody. Everyone's always betrayed me. I did have a close friend for a long time, but then she slept with my old man. Another friend, she's not the same person she was. She's totally whacked out on drugs. She always wants to fight; the drugs have got to her. (Participant J)

Nature of Support

In an effort to better understand the notion of 'support' from the lived experience, the concept of support was explored with each participant. Talking was identified as the most common and most helpful form of support. Participants also identified other forms of support which included providing physical labor, sharing food, and offering a place to sleep. Most participants did not mention financial support within their support network.

When questioned about lending or borrowing money, participants were not supportive of this idea in principle. The individuals interviewed for this study did not want to be involved with supporting someone else's drug habit even though they were all in the same situation. As one individual explained, *"Do whatever, not support their habits though. They don't like that, but they appreciate it in the end."*

It is interesting that not one participant identified his or her regular sexual partner as a primary source of support or someone with whom to talk. Participants would frequently refer to 'my old lady,' 'my main man,' or 'my common-law'; but they were unable to talk about the intimate aspect of these relationships. One individual tried to describe his relationship with his wife: *"She kinda goes her way and I go mine. Then we get together to do it, ya know?"*

Some respondents identified an individual from an agency as their primary source of support. These individuals included staff from Living Positive, Kairos House, and University of Alberta Hospital HIV Outpatient Clinic. Alcoholics Anonymous (AA) sponsors were frequently identified as a strong source of support over a long period of time. Three participants felt that their AA sponsor 'knows me better than anyone out there.' None of the respondents reported being alone on Christmas Day. Each participant described spending time with family members, a close friend, or a staff member from local agency.

Personal Health Practices and Coping Skills

Data related to personal health practices and coping skills are organized within four key themes including injection drug use, condom use, HIV diagnosis, and depression/suicide attempts.

A. Injection Drug Use

The age at first injection ranged between 14 and 46 years, with the majority of respondents injecting for the first time between 14 and 19 years of age. Seven respondents reported using cocaine with their first injection, and the other three respondents reported using Talwin and Ritalin (Ts and Rs). Each respondent described their life at the time they began injecting drugs. None of the participants injected themselves the first time; they all had access to someone, whether partner, acquaintance or stranger, who possessed the skill and who was willing to assist them.

Access to Injection Drugs

Five individuals described personal exposure to people using injection drugs over a long period of time prior to using themselves. Contact with injection drug users ranged from a loose, extended social network to an intimate relationship with a sexual partner. As well as exposure to drug using behaviors, injection drugs were readily available through their social networks.

[Can you tell me about the first time you injected?]

I was about fourteen. I watched people do it for a few years before I tried. I seen people, it seemed like it made them happy and they didn't care about nothing else on earth. I asked a friend to hit me. At first, he didn't want to but I made him feel guilty. I told him I would find someone else to do it and if they ended up killing me, then that'd be on him. I was going to do it because I wanted to feel good. (Participant A)

I was eighteen. I was wandering around downtown with my ex-common-law. He was a harsh junkie. We'd be walking in those little rat holes beneath buildings and he'd be shooting up. I was so naïve back then; I wanted to know what the hell he got out of the damn shit. So he hit me and it was like, "Oh wow, hard-core rush, man!" (Participant C)

I was probably twenty-six. I was with a brigade of prostitutes that I hooked up with at an escort agency. I was working security for the agency. One of the girls asked me if I wanted to get high. She had a medical student and assured me that he knew what he was doing. So we did it and it kind of spiraled from there. They did all the preparation, hit me and everything. (Participant D)

Although injection drugs were easily accessible through her boyfriend who used, one young woman began injecting as a means to address her recent weight gain.

I was sixteen and down on the drag. I was with a boyfriend at the time and he got me into it. I wanted to try it. I gained weight when I was in lock-up, and I couldn't handle it, and I found out cocaine makes you lose weight, so I said, "Yes, I'll do it. Anything to lose weight.

Others turned toward injection drugs when they were feeling depressed following the demise of an intimate relationship.

I was working, earning good money up north. When I came home, my wife had left me. I lost the house, everything. I was depressed. It would have been about '95. I snorted. That was the only way I knew how to do cocaine. That carried on for a good six, seven months, and then I got tired of having a runny nose so I started doing crack. So here I am down on [street] and I see this guy hitting [injecting] his chick. I asked him how you do that and he fixed me. I was looking for somebody to fix me; I already had my own rig. (Participant B)

I was out to the bar. I'd just broken up with my girlfriend, so I was in that "I don't give a damn" state of mind. I went home with this girl and she had the rigs and some coke. She showed me how to do it. (Participant I)

Another respondent reported that she needed to inject to tolerate working in the sex trade.

I was seventeen years old. I was here in Edmonton at a women's shelter. I got stuck with one of the girls that works the streets and she got me into working the streets too. She wanted me to go with her on a date, but she was taking out about three Vietnamese guys. I told her she had to give me a shot or I wouldn't go [on the date]. And the next thing you know, the next day, I was right into it.

Another individual disclosed she was not able to get her drug of choice (crack) that she had been using for a number of years and so she resorted to whatever drug was readily available which happened to be cocaine by injection.

> *I went hard on crack cocaine for a couple of years but then, when I was twenty-one, there was a drug bust and everything had been cleared out. I had money to score; just that there was nothing available in terms of rock. There was no baking soda available to cook the stuff because everything had been cleared out. So this guy, he was more like a dealer, said, "I'll tell you what. Just try five units and see how you like it." And this was how I was introduced to the injection of needles. It was the best ever. I know I'll never get that same high again, but I never quit chasing it. The first time is a real zinger, the real rush, the real feeling of elation and kind of that sensation of floating and whatever. (Participant E)*

Drug of Choice

Seven participants identified cocaine as their drug of choice overall. Of these seven, one individual reported heroin as his preference but he explained that it's harder to obtain in Edmonton. The reasons given for their drug preference included the particular high of cocaine; *I liked it too much; the first time I did it, I wanted more right then and there, it was like hard-core rush, man.*, and the availability of cocaine; *I tried heroin and T&Rs but for me, it's coke. It's very easy to get.*

Three individuals reported T&Rs as their choice of injection drug. Their preference was related to the negative effects of cocaine use in that *"you don't need it as bad as coke, so you don't get in as much trouble [with the law]. But it's still a good high."* Participants also described other negative aspects of cocaine, including the short duration of the high and the insatiable need for more:

> *I really like coke, but I was always in trouble. When I ran out of coke, I'd go out and do crime, just to get the money to pay for it. Then I'd always end up in jail for stealing, B&Es or robbing people. Can't do enough coke and can't do it in jail, so I just thought it wasn't worth it, because when you inject it like me, you do one, then you want more and more and more. (Participant A)*

Patterns of Drug Use

Individuals were articulate in their descriptions of the social nature of their injection pattern. The frequency of injecting patterns varied from 4 to 24 injections per day, depending both on the drug available and whether or not the individual was with other people when he or she was injecting. Cocaine demands more injections than T&Rs, with an average of 20 injections a day for the participants of this study. All but one of the participants had experience with injecting in public places such as back alleys and convenience stores when nothing else was available, but they described their preference as a relaxed setting indoors. As one individual summarized: *"If I can have a roof over my head, why would I go to an alley?"*

The majority of participants also preferred to inject with other people. They described 'tripping too easily' and feelings of paranoia and fear, so they made sure that they were around other people. One young woman described it as, *"You have to babysit me. I get paranoid and freak out, so I always need someone around."*

Drug Houses/Shooting Galleries

Participants were asked about their experiences with drug houses and/or shooting galleries because of the high risk associated with them. It was discovered that the term *shooting gallery* is somewhat dated, because many of the participants did not understand the question. They were then asked about injecting in places where there were groups of people they did not know. Two primary reasons for injecting in a drug house or shooting gallery were identified. For some, it was their place of residence, which constituted 'fixing at home': *"I lived in a crack house, so I'd shoot up there just 'cause I lived there."*

The second rationale for injecting in a shooting gallery was that it was often a 'house rule' if drugs were purchased there:

> *You go and buy dope there, you can't leave with it. They'll have a guy at the door, that works the door, and you go into the room, he'll give you a needle, and you go. There's always someone in that room. You have to do it right there. And they've got a box where you put your empty rigs after you do it. And then you sit there and whatever, . . . relax. (Participant A)*

> *Five years ago you bought them [rigs] loaded. You don't know if they were new needles. In the Fortress there was this big glass mirror. You could see yourself in there, but they could see you on the other side, and there used to be a slot where you put your money in; then they'd push out a rig loaded with dope. (Participant J)*

Edmonton Police Service initiated a massive crackdown on drug houses in the city a number of years ago. These actions resulted in many of the established drug houses and/or shooting galleries being closed down. One participant described a negative impact of this initiative as a more chaotic injection pattern including outdoors:

> *In the beginning I injected anywhere there was a [drug] house or a shooting gallery. So there were lots of people around. But then when the houses started being eliminated, that's when injection became anywhere—in the back alley, in the nearest bathroom, mostly at convenience stores.*

Access to Needles and Syringes

Participants described a number of sources to gain access to needles and syringes, including from the Streetworks program, from drugstores, and through drug dealers. Most respondents did not describe a constant source but, rather, access was determined 'at the moment' and depended on what source was available to them. Four participants acknowledged accessing needles through the Boyle McCauley Health Centre if they were already at the health center, but that they did not seek out the health centre specifically for their needle supply. Others identified the Streetworks van as a source for needles but

qualified their response with *"If it's there. There's a lot of hours it [the van] doesn't work."* The easiest point of access tended to be through the drug dealers, however. Individuals do not require further services or supports if they buy loaded rigs.

Sharing Patterns of Drug Paraphernalia

All of the participants in this study disclosed that they have shared some type of injection equipment including needles, water, spoons, vials, and filters. Two themes regarding sharing patterns emerged from the data. The first theme is related to ignorance regarding viral transmission. All of the participants acknowledged that they were aware of the risks associated with sharing needles, but that they were not aware of the risks associated with sharing less invasive types of equipment:

> *No, I don't remember sharing rigs, but I shared a spoon. I think that's why I got AIDS. Now, I'm not sure; nobody's going to be sure. But I think it was from sharing a spoon. I didn't share rigs because I knew all the risks of doing that. I was very careful about rigs, but I didn't think about the filter or the spoon.*

The second theme is related to a false sense of security with sexual partners. Participants tended to employ more stringent precautions with their drug practice when they were with someone other than their primary sexual partner. A number of participants attempted to use the sharing of drug paraphernalia to illustrate the level of intimacy in their sexual relationship. As one individual described:

> *The only person that I shared with was the girl I was with at the time. We did it because, yes, we were together. We had been together for a number of years, and it was unprotected sex, it was swapping spit lots, everything. We would use the same spoon or lid to clean it and filters. We were together, man.*

Trying to Quit/Access to Treatment

Only one participant in this study had never tried to quit injecting drugs. He described taking efforts to manage his drug habit rather than trying to stop altogether. This individual disclosed that when he was injecting cocaine, he resorted to petty crime to finance his drug habit. Over time, he realized that he would never get enough cocaine and that his crimes would lead to more jail time, so he switched to T&Rs. He was satisfied with the high he got from the T&Rs and did not crave it when he came down as he did with cocaine. He clearly articulated experiencing withdrawal from cocaine, and he was happy that he did not have that experience with T&Rs. When asked about quitting injecting altogether, he responded: *"Oh, I'm not addicted. I quit when I want. I do it when I want. But I only do T&Rs."*

Two individuals were able to quit on their own without accessing a treatment program. One young woman had not injected for two months at the time of the interview. She was, however, smoking cocaine instead. When asked how she was able to manage without external support, she replied, *"Because I know how it is, because I know it's more addicting [than smoking it]. If I go back to the rig, I'm back to the rig all the way and I can't handle it. If I can just keep myself busy."* This same individual was scheduled to begin a day program through the Alberta Alcohol and Drug Abuse Commission (AADAC) the week following this interview.

The second individual, who had never accessed a treatment program, described himself as a social user who had never felt that he was addicted to any particular drug. He tended to use injection drugs within the context of life rather than being driven by a need

to find another fix as others described. When his drug habits began to interfere with his life overall, he simply stopped using.

> *I wasn't a really chronic user. I'd use it on the weekends. I'm not your typical junkie. I'd pay my bills first, then if I had fifty dollars, I'd go and get some coke. When I decided not to [do it any more] when it interfered with my job. I just got tired of it. I said, "Enough is enough." It was not doing me any good; not sleeping and you're doing coke all night and then you're going straight to work. That's when I just put the needle down. (Participant I)*

Seven participants in this study had attempted to quit injecting drugs more than once. One individual described a classic experience in which she injected on and off. She explained that although she had used injection drugs over many years, she had never felt that she was addicted to the drug itself. When questioned about why she used when she did, she explained that she was heavily influenced by those around her and she tended to join the social activities of others. Alcohol was her drug of choice, and injection drugs would always come second. She was currently married to a man who used, so the drugs were readily available and the behavior was carried out in her home. The individual described how she "just sort of falls into it for awhile and then quits again." This cycle has repeated itself many, many times over the course of years.

The other six participants in this study had accessed treatment programs with varying degrees of success. Participants were asked to describe the point at which they decided to go for treatment, to identify components of the treatment program that were most helpful, and to make recommendations for improvements with the programs they had tried. Two key reasons for accessing treatment programs were identified: a recent overdose and 'hitting rock bottom':

I OD'd and got scared. Then I went into treatment for a month. I don't remember much about it, but I was clean for a good fourteen months before I put a rig in my arm again. (Participant B)

I went to detox recovery and I've been clean ever since. The fact that people were worse off than I was. I seen people going through heroin withdrawal, a lot of cocaine withdrawals, and they were in way, way, way worse shape than I was. And they were sticking it out, so it kind of motivated me to do it more because I did it basically because I had hit bottom. But to see the people that were there was kind of inspiring, and [I had] more of a drive to succeed in it. (Participant D)

Treatment has always been a very humbling experience, knowing you've hit rock bottom and there is no other way unless you take the steps necessary to go into rehab. I was physically, mentally, spiritually dead just about. There was nothing left of me really; I was just a walking shell. (Participant E)

One woman described her descent to 'rock bottom.' She and her husband were earning a substantial living by selling drugs for a dealer. They were living with their two children in a lovely Heritage home, had three vehicles, and the children had all the toys they could wish for. She stated that the children had stereos in each of their bedrooms even though they were only one and two years old. She disclosed that she did not need to buy food because she could afford to order out every meal. This lifestyle came to an abrupt halt, however, once she and her husband began using the cocaine and heroin they were selling.

I had everything planned; get up, do my fix, feed them [children], change them, get them in their playing clothes, hire a babysitter for the day so I could do coke and heroin that whole day. I'd give the babysitter five hundred bucks for the day. That's how much money I had coming out my ass.

In time, she and her husband sold all of their personal possessions to the local pawnshop for money to buy dope. This woman hit rock bottom one winter morning when there was no food in the house, no money for a morning fix, the kids were sick, and there were only two diapers for two children for the day. She gave her bank card to her husband to get some food and diapers, and he came home with cocaine. It was at this

point that she called child welfare to pick up the children and checked herself into a detoxification program for 30 days. Her personal struggle with drug addiction and intermittent treatment would continue for the next four years.

Participants identified a number of helpful components of a successful treatment program. These components include a theoretical understanding of addiction as a disease, connecting with others who understand what it is like to struggle with an addiction, and a residential setting with a strong healing component away from the community where the drug use occurred:

> *The treatment centers have helped me understand that it's a disease and that I'm going to have it the rest of my life. Being part of group, knowing there are other people like me out there. It helps to get away from everything. (Participant C)*

> *I really feel residential programs are important; to be able to get away from it all. It can't be too institutional, you know, where you don't have any privileges at first and then work your way up. Their way of restoring structure in a person's life is a little too strict for me. (Participant E)*

> *There's not enough people there would have used and should be counselors. There should be a cocaine counselor who has used. Then we could relate. I found it too giddy there and left.*
>
> *Then I went to a treatment centre up north. I really loved it there. It's out in the woods and safe. You can go on outings and swimming. You can listen to an Elder and talk about anger. (Participant J)*

Despite the successes with treatment programs, albeit sometimes temporary, most participants spoke of the relentless struggle with their addiction and the lure to start using again:

> *The relapses don't get any better. It could be an argument I had with my mom, it could be feeling down about my kids, it could be thinking about all my exes, or just not feeling good about myself at all that day. There are two different ways of looking at it: You can think you have it beat and I can just socially drink once in awhile, or that if I don't run my ass back to the Twelve Step program, I'm fucked. It's the lure of it, the seductiveness of it. (Participant C)*

B. Condom Use

All participants reported inconsistent use of condoms. The majority of individuals reported using condoms more often if they were working in the sex trade, if they knew their sexual partner worked the streets, or if they had sex with a sex-trade worker. Active participation in the sex trade, however, did not guarantee the use of condoms. According to the participants in this study, the decision to use condoms was usually related to the level of risk associated with specific sexual activities. Most respondents typically did not use condoms with hand jobs, used them occasionally with blow jobs, and almost always used condoms with lays (intercourse).

Participants disclosed that they did not usually use condoms with their regular sexual partners. The majority of participants implied a belief in the safety of a monogamous relationship. Even if an individual had reason to suspect that his or her partner was not monogamous, each participant tended to romanticize the current personal relationship.

[When do you use condoms?]

> *I use condoms with all the women except my common-law. I don't think that she works the streets. I think she does it behind my back though. I use condoms with my ex old lady because she works the streets; she's a prostitute. (Participant A)*

Some individuals described other factors impeding their judgment to use condoms such as perceived risk in relation to the city they were in at the time, being high and not thinking or caring about sexual risks, and being in a hurry to finish the sexual act. One participant was adamant about his dislike for condoms and his refusal to use them, regardless of health risks: *"I hate the damn things. I think I've used them once or twice in my life. A man loses his concentration when he's trying to put one of those things on."*

Many of the participants denied having been pressured in some way not to use a condom. However, the women who had worked in the sex trade had all experienced such pressures:

> *I've gotten tempted; "I'll give you extra so-and-so bucks if we don't use condoms," but I won't do it. Guys have tooken off condoms while they're doing me, but that's their problem because I've told them, "Just put the condom back on."*

C. HIV Diagnosis

Nine of the 10 participants in this study had been tested for HIV infection many times prior to receiving their positive diagnosis. Each participant was aware of his/her risk of contracting HIV through injection drug use, and there were many reasons why they were not able to protect themselves from the virus. The majority of participants described their drug addiction as overriding their ability to protect themselves:

> [Some people say they thought they would likely get HIV sooner or later and that there wasn't much they could do about it. Did you ever feel that way?]
>
> *Yes. As soon as I realized I had become dependent on a narcotic, I figured it was pretty much inevitable unless I could have dissociated with it right then and there. But, unfortunately, I chose not to, and my lifestyle just kind of swept me away, and I just stuck with it. It was the way to go at the time. If it happened, it happened at that point in time, but I was at the height of my addiction and the rush. I wasn't concerned. (Participant D)*

One young woman talked about her need to have a baby. She described knowing that she was at risk for getting HIV, but all she wanted was a baby and it was worth dying for. This individual had never conceived, but she had contracted both Hepatitis C and HIV. During the interview, this young woman suggested that she had contracted HIV through unprotected sexual contact and not through injection drug use. She calculated the months of risk between HIV antibody tests, and it appears that her calculations were

correct. She received a positive blood test for HIV three months prior to using injection drugs. She contracted Hepatitis C recently from a needle used by an individual known to have Hepatitis C.

All of the participants in this study knew individuals living with HIV prior to their own diagnosis. The individuals ranged from loose, social connections on the street to close friends and family members. Most participants talked about their risk of contracting HIV as yet another risk in their lives and how a normalcy develops over time:

> *Towards the end of my using it was just like, I don't know, I intuitively knew that I had it. But at the same time, I was still thinking it'll never happen to me. And yet at the same time, I'm working the streets, I'm injecting drugs, I'm hanging out with people, I'm in drug houses, shooting galleries. You could actually get poked with a needle anywhere. Everybody is sort of living the same risk. You get kind of numb to the risk because everybody's living it. (Participant E)*

Many participants suggested that even though some individuals with whom they were familiar had contracted HIV infection, many more people they knew were using injection drugs, and they had not yet contracted the virus. Therefore, luck must be a factor in protecting one's health: *"Actually, I always thought I'd be the fortunate one; be lucky and never get it."*

Three of the 10 participants were symptomatic when they had their positive blood test. One participant was working 12-hour shifts in a plant for a long period before he found that he could not manage more than five hours due to fatigue. He sought medical attention when he developed an oral yeast infection, and his doctor told him that he had either diabetes or HIV.

Another participant did not think that he was at risk for contracting HIV infection because he injected only on weekends, he was certain he has never shared a needle, and he had quit injecting drugs five years prior to his diagnosis. It never occurred to him that

he was already living with the virus because it had been so long since he had last injected, he did not know of the risks from sharing a spoon, and he was able to work full-time. He was tested in the Emergency Department at a local hospital when he presented with HIV-related symptoms.

The third individual required cardiac surgery resulting from his chronic drug use. He had an HIV antibody test done as part of his preoperative laboratory work-up.

One participant discovered through the provincial prenatal HIV screening program that she was HIV positive. It was a very negative experience, and she still felt some bitterness towards the obstetrician. This participant stated that the obstetrician had telephoned her to go in for an appointment regarding some test results. When she presented herself to the doctor, the doctor asked, "Why didn't you tell me you had HIV?" The participant was shocked and explained that her last blood test had been negative. The doctor said, "Well, you're positive now." The participant described her initial reaction of wanting to strangle the doctor despite knowing that she had been at high risk for contracting HIV infection.

None of the participants in this study were able to identify a specific behavior at the probable time of infection that differed from their usual injection and sexual practices. All of the participants had shared a syringe and needle or other form of drug paraphernalia and/or engaged in unprotected sexual activities prior to acquiring HIV infection. Three individuals reported strong assumptions about the individual whom they believed to be the source of their infection. Upon further probing, it is difficult to ascertain the time of infection and related behavior due to the individuals' involvement in multiple high-risk situations and impaired memory from substance use.

Individuals were asked about the impact on their drug use when they received their diagnosis of HIV infection. Four of the 10 participants in this study disclosed that they had gone on a binge ranging from a couple of weeks to eight months.

> [Some people say that they went on a real binge and fixed like crazy when they first found out they tested positive. Did that happen to you?]
>
> *Yes. That's how I ended up. For eight months almost. I just went crazy; I didn't care. Who gives a shit? I'm going to die here anyways. I thought I was going to die right away. (Participant H)*

One individual could not recall events immediately after his diagnosis, and five individuals denied binging. Of the five participants who did not go on a binge, four felt that it was situation specific: One woman was incarcerated in youth detention, one woman was pregnant, one man was in hospital for cardiac surgery, and another man was in hospital with active pulmonary tuberculosis.

D. Depression/Suicide Attempts

Nine of the 10 respondents in this study reported a history of depression. Three individuals felt they were depressed at the time of the interview. Their depression was related to unemployment, grieving the death of family members, working the sex trade, and living a chaotic life. None of the participants identified living with HIV infection as a source of their depression.

> [Have you ever felt depressed?]
>
> *Oh yes, definitely. I am right now because I'm stagnant; I'm getting nowhere. I can't move on with my life because I'm broke; I can't get a job; I can't get rid of the problem of being broke without working. (Participant B)*
>
> *I'm very depressed of all the death that's been going on. One year after another I've lost my brother, my other brother, my sister, and my other sister now. It's something like I'm building a real hard shell against. (Participant H)*

Yes. When I'm on the streets, I feel no depression. When I'm doing drugs, I don't feel the pain. When I'm straight, it's hard, it's really hard. Right now it's hard. (Participant J)

Two individuals denied depression but they did describe a strong sense of melancholy:

I'm not depressed, but I'm not happy like I used to be. I'm more serious and more mellow, I guess. I laugh and joke around and stuff, but it's not the same as when I was a kid. (Participant G)

Not really. I found a lot of escape in drinking beer; I smoked a lot of weed; I listened to a lot of heavy, heavy metal for hours and hours and hours. (Participant D)

The individuals with a history of depression were able to describe a particularly low period in their lives from which they felt they have recovered:

Oh yes, yes. After my dad got killed and then my mom just dies. . . . And my uncle died the same time as my mom, my favorite uncle, so at the time I was real depressed, eh? (Participant A)

Yes. I was on depression meds all through my teens; when I lived in the group homes, I was on antidepressants. And I was also on antidepressants after each of my births of my kids. Severe postpartum depression. I get pretty down and low, kind of can't seem to crawl out of the corner sometimes from crying or whatever. (Participant C)

Eight individuals had attempted suicide in the past. When questioned about the experience, none described an intent to die but rather a determination to end the despair they were feeling at the time. Interestingly, none of the participants attempted a violent form of suicide such as gunshot, slashing, or hanging. All of the participants reported that using drugs, whether swallowing pills, drinking alcohol, injecting, or sniffing, were their chosen method to attempt suicide.

[Have you ever wanted or tried to kill yourself?]

Yes, I tried once, but that was all. That's when I used to pop pills and drink. At the time I was real depressed. Popped some pills, drank, and cranked. I didn't mean to try and kill myself; when I sobered up, I realized, "What the hell . . . ?" Because my lifestyle growing up, I seen lots of people kill themselves and trying to kill themselves, and a lot of friends did kill themselves. The way I look at it, it's not worth it. There's more in life, I think. (Participant A)

Oh yes. That was mostly after I started my heavy drug abuse, to the extent where you're getting your welfare cheque and spending five or six hundred dollars in one night and waking up in the morning with nothing. (Participant B)

Yes. I was suicidal in my teens. My last attempt, I think, was in '93, right before my son was born. Or not before he was born; before I found out I was pregnant with my first. (Participant C)

I tried suicide in, it was 1985. I tried eating a bunch of painkillers; that was the only attempt I ever had on it. Don't know why. (Participant D)

Yes, because I felt like there were no answers in life and that I didn't want to feel the pain I was feeling. I thought that was the easiest way out. But then knowing that my son was here, that he'd have to go on without his mom. (Participant E)

Oh yes, I've tried. I'm allergic to aspirins, and I used to try taking a whole bottle, except I never got around; one or two and I'm throwing up. And then I tried slicing myself. You can barely see it no more. Maybe two years ago I sniffed myself into oblivion before I quit, and I ended up in the hospital, in the U of A. I almost gave myself a heart attack. (Participant F)

Yes, lots of times. I've been suicidal since I was nine years old, but nobody knew about it till I was fourteen. I took pills, I've tried drugging myself and stuff but I didn't know what I was doing. I kept my anger and all my feelings inside, and when you do that, you feel really down, and then you end up wanting to kill yourself. Just to feel better. (Participant G)

Yes, I've tried to commit suicide maybe three or four times. My brother cut me off. The thing was, I didn't want to kill myself; I wanted attention. The only time was if someone dies that is close to me or if I've been with them. I didn't do hanging or nothing; I just tried to go overboard on taking drugs and shooting up. But as I grow older it's not a big deal with me no more. What good's it going to do? I have a daughter to think about. (Participant H)

A summary of personal health practices and coping skills in relation to the number of participants is reported in Appendix F.

Health Services

Data related to health services is categorized into two themes; general practitioner and the Streetworks program.

A. General Practitioner

The majority of participants reported having a regular general practitioner, and they were very happy with the service and support that their doctors provided. The positive nature of the doctor-patient relationship was related to the ability of the practitioner to listen to the client, to problem-solve together, and to treat the client with respect. Participants described the support they received with the following comments:

> *He's there for me, through thick and thin. He knows more about me than half of the counselors I've seen, and he listens to me and doesn't judge.*
>
> *He's a hundred per cent. He helped me wean off morphine and he listens. He's pretty inspiring as far as the disease goes because he actually knows not too much about it, and he's kind of learning on the way. We have a pretty good rapport. He's a really cool guy and he bends the rules a bit. They encourage appointments, but he gets me in if I need be. It's wonderful. I'd like to take him golfing, I really would. (Participant D)*

Two individuals reported they did not have a family doctor for different reasons. As a result, both men accessed health care services through the emergency department at a local hospital when necessary:

> *I don't believe in doctors really. I never did. That's why I don't have a family doctor.*
>
> [So if you tripped on the curb going home tonight and you thought you broke your ankle, where would you go?]
>
> *Nowhere. Lay there and get used to the pain. Let it heal on its own. (Participant A)*
>
> *I don't see a doctor regularly. That's probably one of my biggest problems right there. I grew up in the country, and the thing was that if you got sick, you stayed home until you were well enough to go back out again. I've seen doctors here and*

there over the years, but only when I get sick. I usually go to Emergency and see whoever is there. (Participant I)

All of the participants in this study were extremely satisfied with the care and support they received from their infectious-disease specialist and the staff at the HIV Outpatient Clinic. The individuals commented on the close monitoring of their infection through frequent laboratory tests and their active involvement in decisions related to their care and treatment. There was one criticism voiced related to limited flexibility with the scheduling system at the hospital. The various specialists provided clinical services during specific days of the week, and appointments are required. Although this individual was aware of the reasons for this system, he voiced frustration with the difficulty he had experienced in trying to access his doctor without an appointment.

One woman reported a very negative experience with public health services in relation to her diagnosis of HIV infection. She became pregnant approximately one year after receiving her diagnosis, and she continued to inject cocaine throughout the pregnancy. Her family practitioner recommended that she start AZT during the pregnancy, and he referred her to an infectious-disease specialist at the HIV Outpatient Clinic. The participant reported that she found the doctors very supportive and understanding of her situation. However, she found the nurse from the health unit difficult to deal with:

She was following me on the street. Following me everywhere, chasing me with these pills just to make sure I was taking my pills at home. And I was getting annoyed: "Fuck off, fuck off woman." She chased me around, and it was like, "Oh, please leave me alone." I was on the streets. I'm fixing. She doesn't know if I'm taking it regularly. So she would track me down and make me take them [medication] and leave me alone until the next day.

This participant was very grateful that her baby has tested negative for HIV infection so far but her anger toward the public health nurse remained.

All of the 10 participants in this study were familiar with various types of antiretroviral drug therapy since acquiring HIV infection. Each participant reported that their doctor at the HIV Outpatient Clinic had discussed medical rationale for initiating specific regimes and outlined a proposed plan for treatment if indicated. None of the participants acknowledged the availability of antiretroviral drugs as influencing their perceived risk for HIV infection or their injection drug practices.

Three individuals were currently on a drug regime. One participant did not report adverse effects of the drug therapy; however, the other two individuals experienced many problems, including negative side effects and resistance to the effects of the drug:

> *I didn't like the AZT; it made me sick, so I just said, "Piss on it all." I was kind of mad and went off all my medication. He [infectious-disease specialist] stuck me back on them after a month, but I developed a resistance to antiretrovirals and they replaced it with some nasty drug. I have to take ten pills a day. (Participant D)*

> *Those drugs they gave me, I went through the seats, the diarrhea, the loss of appetite, the not sleeping. They did good for awhile, and then they did a backfire, because I cut off for awhile. They switched it over to these other drugs; I just started them. I don't know what's going to happen with these. (Participant H)*

One participant was keen to initiate antiretroviral drug therapy but had not yet done so due to a recent surgery. Three other individuals reported feeling physically well, and they would not begin drug therapy until their laboratory results indicated a need to do so. Two women were on drug therapy during a pregnancy but discontinued the regime postpartum. Both women described taking the medication *"for the baby, not for me."* They both felt physically stronger without the medication, and they would not resume treatment unless there was a change in their current health status. One participant had

been on antiretroviral drug therapy earlier, but her physician discontinued the medication following a severe asthma attack. Another participant was unable to maintain the rigorous schedule of the drug regime:

> *The time schedule, the damned pills you have to take, all those pills. You have to take them with food, and I'm not eating right. It's just the responsibility. I'm not ready to take that on right now. (Participant C)*

B. Streetworks Program

The majority of participants reported that they had used the Streetworks program at some point, but none reported consistent use of the program. Two individuals had specific criticisms of the program, but it appears that their concerns were related to ignorance about the philosophy and statistical requirements of the program:

> [So you've never actually gone to Streetworks yourself?]
>
> *No, I was too chicken shit to. I was under age; I was wanted. I didn't know if they would rat me out and stuff. So I got the working girls to go for me. (Participant G)*
>
> *I stayed away from it [Streetworks] because they want to know your name and stuff, and I thought, "It's none of your business." I didn't want to advertise. And I've always had the money to go and buy my own. (Participant I)*

Participants identified helpful resources available through the Streetworks program, including needles and syringes, condoms, vitamins, pregnancy-testing kits, and emotional support. When questioned further regarding their sporadic connection with the program, participants identified two challenging issues with the needle exchange program. The first is the limited hours of operation of the mobile van, and the second is a chronically malfunctioning cell phone:

[I need to understand why you couldn't get a new rig for yourself sometimes.]

There was no means of getting to a twenty-four-hour drugstore. There wasn't transportation. Then there's always the dilemma of having no money to buy one. And, of course, the van doesn't work twenty-four hours a day. (Participant E)

Sometimes the van wasn't open; sometimes it was holidays; sometimes the van's phone is messed up so you don't know where the van is. Their phone is always messed up, their cell phone. It just pisses me off. So then we're in the tin can digging for used rigs. (Participant J)

All of the participants in this study acknowledged that receiving a diagnosis of HIV infection caused them to reevaluate their lives and make some positive changes. But they all spoke with regret about not having made changes earlier in their drug-using careers:

[Some people say that getting HIV was a bit of a wake-up call to help get their life straightened around. Is that your experience?]

Yes, it is a wake-up call. Ever since I found out I had it, I'm not in jail no more; I don't live on the street; I'm not as bad as I used to be. I'm more or less at home all the time now, not as before, I was always on the street. But it didn't stop me from using. Use condoms a lot more now, but it's too late. (Participant A)

One woman provided a tragic summary of the conditions leading to HIV infection and the inability to protect oneself from the virus:

It's how that person wants to live their life. I've lived on the edge all my life; since I was a kid I was living on the edge. Basically I always felt that I was never cared for. Nobody really gives a damn. And I knew that before I even contracted HIV, I knew that nobody could change me. What is meant to be is going to be. The most you can do is let them know what the consequences are.

The therapeutic effect of sharing personal and often painful experiences was observed during each interview. All of the participants expressed gratitude for the opportunity to participate in this research study.

CHAPTER FIVE

DISCUSSION

Introduction

In this chapter, the major findings of this study are reviewed within the context of existing literature. The findings are organized in relation to the three research questions: the context in which individuals are at risk of contracting HIV infection through injection drug use, the barriers to existing education and prevention programs and services for individuals at risk of contracting HIV infection through injection drug use, and the indicators for designing and implementing an effective HIV prevention program in Edmonton. The strengths and limitations of the study are presented including my personal reflections with the research process. Implications for practice and recommendations for further research are outlined.

The Context in Which Individuals are at Risk of Contracting HIV Infection Through Injection Drug Use

The findings of this study suggest a strong relationship between an individual's early life experiences and risk of HIV infection. Three major factors influenced the risk of contracting HIV infection: unstable family relationships, childhood sexual abuse, and negative social connections. These factors are discussed within the context of the health determinants 'healthy child development,' 'social support networks,' and 'gender.'

Healthy Child Development

There are two primary themes within the concept of healthy child development including family relationships and neglect and abuse.

Family Relationships

Perhaps the most compelling finding in this study is the profound impact of negative family relationships on the individuals. The personal stories of the participants in this study identified many common characteristics, including unstable family situations and dysfunctional familial relationships. Although the study population is not homogenous in terms of age, education, or social background, all of the participants, with the exception of one, experienced chaotic childhoods. However, the individual who denied a chaotic childhood related a great deal of anger towards his father for the childhood he experienced:

> *I have resentment to my father. My friends are out playing and I'm working; it doesn't matter if it was physical work or working in a machine shop. The resentment is the fact that I never had a childhood; I never had teenage years. I was always working and usually for nothing. That's what I will call abuse.*

Mills (1997) reported similar findings in a study examining HIV risk behaviors among Aboriginal women. All of the women, with the exception of one, experienced turbulent childhoods, including frequent moves, unstable family units, and frequently absent fathers. The majority of participants spent many of their childhood years in foster care or institutional settings as did the participants of this study.

Neglect and Abuse

A childhood marred by chaos, abuse, and/or neglect is one of the most generalizable areas of a user's life. A history of abuse and/or neglect throughout childhood has been identified among individuals and their sexual partners who use injection drugs (Frankl-Howard, 1992; Medrano et al., 1991). The majority of participants in this study reported extensive experience with chaotic households, and

many of the individuals described abuse and/or neglect from their early years. A strong sense of being 'unwanted' has resulted in an elevated need to belong. This need and fear is the basis for many personal decisions with negative consequences: the decision to seek out individuals with similar needs, the decision to try injection drugs, and continual relapses with friends and family members.

This finding is consistent with research by Felitti et al. (1998). These authors examined the relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The results of the study showed that seven categories of adverse childhood experiences were strongly interrelated, and individuals with multiple categories of childhood exposure were likely to have multiple risk factors later in life. The findings suggest that the impact of these adverse childhood experiences on adult health status is strong and cumulative. More specifically, the prevalence and risk of alcoholism, use of illicit drugs, injection of illicit drugs, 50 or more intercourse partners, and a history of sexually transmitted disease increased as the number of childhood exposures increased. A review of several studies on women in alcohol treatment facilities found that 53%-85% of women provided a history of incest or sexual abuse (Hurley, 1991).

All of the women in this study survived physical, emotional, and/or sexual abuse during their childhood. According to the literature, a history of having been a victim of child sexual abuse is not uncommon among women who inject drugs (Denenberg, 1997; Mills, 1997; Miller, 1999). Almost inevitably, the mechanisms compromising women's injection and sexual safety are intricately and intimately connected to life histories characterized by emotional, sexual, and physical cruelty (Spittal & Schechter, 2001).

Three of the five women interviewed for this study described their first sexual experience as traumatic and abusive. Two of the women were five years old and the other woman was seven years old at the time. It is assumed that another female participant experienced sexual trauma in her early years as she became visibly upset when the question was posed and she was unable to discuss the topic. Perpetrators were identified as foster parents, step-siblings, babysitters, and neighbors. The permanent damage resulting from this experience became evident as the women described ongoing experiences with abusive relationships in their adult lives.

Strathdee and Patrick (1997) found that male and female borrowers of used injection equipment were more than three times as likely to report having experienced nonconsensual sex. These results are consistent with other studies that have shown individuals reporting sexual abuse are more likely to engage in high-risk behaviors such as prostitution (Zierler, Feingold, Laufer, Velentgas, Kantrowitz-Gordon, & Mayer, 1991) and illicit drug use (Allers et al., 1993; Lodico & DiClemente, 1994; Zierler et al., 1991).

The normalization of abuse as an inherent component of personal relationships was evident in the participants' stories. When asked to describe her home environment, one participant stated, *"I had an excellent home. Excellent. But I watched my mom get beaten up lots."* Another participant said, *"Abuse, alcohol, abuse. There was lots of that. That's the way it is."* The Prince Albert Seroprevalence Study reported that of the 247 people who injected drugs and their sexual partners who were interviewed, 63% had witnessed abuse between their parents (Seymour & Mattar, 2001).

While not addressed in the literature, the notion of appropriate levels of abuse was an interesting finding in this study. Despite conceptually understanding abuse as wrong, the majority of participants voiced an understanding of abuse because it is what they were raised with. Some of the participants implied that there are appropriate levels of abuse. Comments such as *"but from what I heard from my mom, it was pretty bad for a toddler, my common-law of nine years was abusive, but not that bad, and he would beat me 'til you couldn't even recognize me, and I liked that"* (the participant was very angry with herself at this point because her children had been apprehended by Social Services) suggest that different levels of abuse are acceptable at different stages throughout the lifespan.

Social Support Networks

There are four key themes within the concept of social support networks including influence on injecting pattern, drug of choice, sexual practice and gender differences.

Influence on Injecting Pattern

The importance of the individual's support network was evident in the results of this study. The majority of participants reported a strong social support network. It is interesting to note, however, that members of the social network did not typically include family relations, but rather a collection of individuals they met while on the street. The fact that these social connections tend to have many shared experiences and vulnerabilities with the participants of this study is also critical to the analysis. As one individual described:

> *I was brought up downtown all my life, so they're all users or alcoholics [friends]. We're all the same. First time I ever tried it? I was about fourteen. I*

watched people do it for a few years before I tried. People were doing it around me all the time before I first tried it.

A study of clients using Saskatoon's needle exchange program (Laurie & Green, 2000) found that the social embeddedness of injection drug use contributes to both needle sharing and the difficulty of getting off drugs. For the population in this study, injection drug use was usually initiated by family and friends. The individuals continued to use drugs and share needles and equipment within their most intimate social circle. The level of risk is increased by the fact that refusing to share a needle within this context implies suspicion that one's close friend or partner is 'not clean.' Similar to the findings in a study by Elnitsky and Abernathy (1993), being "careful who I share with" was a common justification for sharing needles among clients of the Calgary needle exchange program.

Participants in this study were able to clearly articulate the influence of friends and family on their injection patterns. One woman was able to quit cold turkey for many years, but began using again when she became involved with a man who was an active user:

"I quit for eleven years straight and then I met up with [partner] and I started into it again. Then I quit again and just sort of fall back into it."

Another participant described how his injection pattern is directly affected by his peer group:

I couldn't really tell you [how often I fix] because, like I say, people come and go. It all depends. People come over, friends come over, and that's what we do. Otherwise I don't.

Drug of Choice

The drug of choice for the participants in this study was strongly influenced by their social network. Several studies have found a higher risk of HIV infection among

those individuals who inject primarily cocaine (Anthony et al., 1991; Hudgins et al., 1995). Seven of the 10 participants were introduced to cocaine at the time of their first injection, and the majority of individuals continued to prefer cocaine over other injectable drugs. The second most popular injection drug among this population is a combination of Talwin and Ritalin. The three participants who consistently injected Talwin and Ritalin explained that they had all used cocaine at some point. One individual reported Talwin and Ritalin as her drug of choice, but the other two individuals report Talwin and Ritalin as their preference because they are unable to manage the physical demands of the cocaine:

> *I'd rather cook it up and smoke it, if it's coke. I mostly just crank up T&Rs, because when you inject it [cocaine], like me, you do one and there's only a short high. You want more and more and more. That's why I do Ts and Rs only now, because when I was doing coke, I couldn't quit. When you come down, you don't crave it.*

Another individual stated, *"Then just needing more, more, more and spending more, more, more. You went for longer and longer on cocaine; instead of overnight you went two days, three days or more."*

This finding is consistent with the results of a study of injection drug-using clients of the Saskatoon needle exchange program (Laurie & Green, 2000). Patterns of drug use tend to vary regionally, and the rate of HIV infection/AIDS in Saskatchewan is considerably lower than in many parts of Canada. "The greater popularity of morphine offers some protection, simply because individuals using this drug do not inject as often as those using cocaine" (p. 352).

Sexual Practice

The majority of participants in this study engaged in high-risk sexual practices prior to contracting HIV infection as well as following their diagnosis. Despite their awareness of sexual transmission of HIV, 7 of the 10 participants did not practice safer sex consistently. Each of these individuals described the effect of drugs on their ability to make decisions—being in a hurry to inject, being too high to care, not having any memory of their actions. This finding is consistent with those in the literature. While exploring the sex-specific determinants of HIV infection among injection drug users in Montreal, Bruneau et al. (2001) found that cocaine use as an independent risk factor for HIV infection cannot be explained by related risk behaviors exclusively. The authors suggested that other unmeasured risk factors are contributory, such as patterns of drug use and high-risk behaviors during cocaine binges: "Users who inject cocaine often describe losing both insight and control while on binges, which could lead them to inject more of the drug and to take greater sexual risks" (p. 771).

Gender

Three specific gender differences in HIV risk related behaviors were noted in the data. These differences manifested in the area of income, injection practices, and condom use. All female participants except one reported that they resorted to prostitution in times of being financially challenged. The one exception had not yet experienced being depleted of financial resources, and she did not know what she would do in that situation. It is also critical to note that none of the women in this study had ever been employed in any field other than prostitution.

The role of the spouse in determining needle-sharing behavior was more important among women than among men (Brook et al., 1997) Females were significantly more likely than males (41% vs. 13%) to report borrowing needles from a regular sexual partner (Strathdee & Patrick, 1997). In a study examining needle-sharing behaviors among injection drug users in Vancouver, Strathdee and Patrick found needle sharing within the context of a sexual relationship proved to be an important risk factor for women. Females were four times more likely to borrow needles if they lived with a common-law partner. Several studies have reported similar findings (Freeman, Rodriguez, & French, 1994; Klee, Faugier, Hayes, Boulton, & Morris, 1990; Saxon, Calsyn, & Jackson, 1994), that women female injection drug users who inject with a sexual partner may be at a higher risk of contracting HIV infection if they are "second on the needle."

Barriers to Existing Education and Prevention Programs and Services for Individuals at Risk of HIV Infection Through Injection Drug Use

A number of barriers to existing education and prevention programs and services were identified by the participants of this study. The barriers are specifically related to the health determinant 'health services.'

Health Services

Two key components were identified within the determinant of 'health services including services provided by general practitioners and the Streetworks program.

The majority of participants in this study reported satisfaction with their general practitioners. It is important to note that participants did not connect with these practitioners by chance; contact with the physician came through a recommendation from a friend or intimate sexual partner who was living a similar lifestyle at the time of referral. Most participants said that they followed up on the recommendation because their friend or partner *'said he was safe, that he wouldn't treat me like shit.'*

According to the findings in both the literature and this study, there are four key factors related to providing effective services to a population with a challenging lifestyle. First, the initial experience is critical. The individual will simply not return if he or she has a negative experience. Perhaps even more problematic is the likelihood that the individual will refuse to seek out another physician or other service provider for fear of repeating the negative experience. Second, service providers must be nonjudgmental and value incremental behavioral change. Third, injection drug users must be treated with respect. Fourth, service providers must be flexible with time given the chaotic lifestyle of the injection drug using population.

Access to necessary health services that have proven effective has a positive influence on overall health. An emphasis on services that prevent illness and promote health and independence is important in improving the health status of the population. Needle exchange programs, a key component of HIV prevention programs for the injection drug using population, have become a primary health service for many injection

drug users. The establishment of needle-exchange programs has created an opportunity for injection drug users to receive clean needles as well as health education, basic health care, and referrals to other services (Laurie & Green, 2000).

All of the participants in this study were aware of the Streetworks program, and the majority had accessed services through the program at some time, but none of the individuals reported regular contact with the program. Numerous reasons for not accessing the program were identified, including being 'too cranked to care' and 'in a hurry to fix,' and operational logistics with the program itself.

Limited access to the needle exchange program is not unique to Edmonton. In a study of clients accessing the needle exchange program in Calgary, Elnitsky and Abernathy (1993) found that the most common reason for sharing used needles is related to the availability or lack of injecting equipment. The sharing occurred more out of necessity because they did not have their own needles and related equipment. As well as needles, 63% of the participants in this study reported sharing spoons, 53% reported sharing cotton or filters, and 65% reported sharing water while injecting.

The results of a study of the needle exchange program in Saskatoon (Laurie & Green, 2000) are similar in that 93% of the participants said that they would not share needles if new needles were always available. Operational details of the program were not included in the publication, so it is unclear why new needles were not more readily available through the needle-exchange program.

A key barrier related to access to the Streetworks program was identified by the participants in this study. Some of the participants reported that the program is not accessible due to hours of operation and geographical restrictions. The following scenario

was described many times: An individual (and friends) obtain drugs and begin injecting, usually in a private home. All of the fixed needle-exchange sites are closed or the individuals are in a setting that is outside the geographical boundaries of the mobile van. When asked, "So what do you do when you run out of new needles?" participants typically replied, "You use whatever's there."

Indicators for Designing and Implementing an Effective and Comprehensive HIV Prevention Program in Edmonton

Limitations of Theoretical Approaches

Although knowledge of HIV prevention is essential, it is now well-established that knowledge alone is insufficient for most individuals to change a behavior that they value. Most models for behavior change have been developed in North America and emphasize the individual. However, most people live in a collectivistic rather than in individualistic societies, and thus the opportunity for impact at the individual level is reduced. "Situational models of risk which emphasize both risk situations and the reduced levels of self-efficacy in contexts in which the individual may have little power to alter their behavior need to be further developed" (Donovan & Ross, 2000, p. 1900).

Theoretical approaches that have proven effective in modifying risk intentions and behaviors include the theory of reasoned action/planned behavior (Fishbein, 1998). Using the theory of reasoned action as the conceptual framework, Pender and Pender (1986) analyzed the relationship among attitudes, subjective norms, and intentions to exercise regularly, maintain/attain recommended weight, and avoid highly stressful life situations. The findings of their research provide limited support for the theory of reasoned action. Lack of prior experience with health-promoting behaviors on the part of

some respondents may account for the limitations in behavior change observed. Individuals who have never engaged in health-promoting behaviors may not have a well-defined belief structure concerning these behaviors. "If further research yields inconsistent findings regarding the potential of the theory of reasoned action to explain various health behaviors, new behavioral models will need to be developed to provide more reliable explanation and predictions of health actions" (Pender & Pender, 1986, p. 18).

Similarly, in the health belief model (Rosenstock, Strecher, & Becker, 1994), an individual's ability to take action against a health threat is significantly influenced by perceived susceptibility to a health threat, perceived benefits to taking preventive action, and perceived barriers to preventive action. The assumption that individuals are in control of their behavior when faced with threats to their health status is a key underpinning to this theoretical approach. Given the complex factors that contribute to the transmission of HIV infection, theories that take into account the context of the behavior may be more useful in working with the injection drug using population. The findings of this study in terms of effective models for practice are consistent with research by Mills (1997) in which the author stated that "current behavioral theories may be insufficient to explain the complex factors that lead to HIV infection" (p. 485).

Harm Reduction Model

It is evident from the participants' stories that many health service providers continue to struggle with the concept of harm reduction as a model for practice. Society's reluctance to view drug use as a legitimate form of risk taking poses a significant barrier to acceptance of harm reduction. Although societies tolerate and even encourage some far

more dangerous forms of risk taking such as car racing, mountain climbing, boxing, and bungee jumping, drug taking is singled out as something inherently and primordially evil. Harm reduction, because it accepts the possibility of drug taking under certain circumstances, is often viewed as promoting intolerable behavior (Riley, 1993). Despite the difficulty for many health service providers to adopt a harm reduction approach, it offers the most practical and meaningful support for the injection drug using population. A harm reduction approach is, therefore, a relevant theoretical framework for the design and delivery of effective HIV prevention services and programs.

Implications for Future Research

This study has added to the body of literature documenting the context in which individuals are at risk of contracting HIV infection through injection drug use. However, further study in this area would confirm and expand current knowledge related to social influences on injection behaviors and barriers to education and prevention programs and services. It would be important to determine whether these findings are similar to other settings in Canada or whether there are significant regional differences.

The exploratory nature of this study has identified the need for further examination regarding the influence of social support among injection drug users. It would be important to conduct a study involving individuals who had quit injection drugs and examine the impact of social support networks on the cessation process.

The need for further understanding of the Streetworks program is evident in the results of this study. Enhancing access to the program would further the impact of HIV prevention activities to a larger audience, and the clients of the program are well-

positioned to identify areas for improvement. As well, the findings of this study support a research project in Edmonton focused on a supervised injection site.

In light of the limitations of current theoretical models, further research is required to develop models for practice that blend harm reduction and health promotion approaches. Longitudinal studies are required to better understand the impact of specific harm reduction/health promotion interventions.

Recommendations for Practice

The experiences of the participants in this study identify many issues regarding current programs and services. As well, many of the participants offered specific suggestions for change.

The implications for practice regarding the negative, long-term impact of neglect and abuse during the formative years are significant. There is a demonstrated need to increase efforts toward primary, secondary, and tertiary prevention of adverse childhood experiences. Intensive therapeutic counseling must be available to assist children heal from their experiences and to develop an understanding of healthy relationships. This type of intervention must also be available to adult survivors of childhood trauma.

Injection drug users need to be actively engaged in the design and delivery of programs and services. Focus groups should be conducted with clients of the Streetworks program as well as with injection drug users who do not access the program to gather valuable insights. Incorporating the perspective of the client in the development process strengthens the potential for truly effective services. Client participation also provides an educational opportunity for service providers regarding the life context of injection drug users.

Collaboration with a broad range of sectors including education, justice, social services, community groups, and agencies is required to enhance the accessibility and effectiveness of needle exchange programs. However, it is recommended that further research be conducted to determine the most important limitations of existing needle exchange programs and to identify areas for potential change prior to establishing broad linkages with various sectors.

The strong, but often negative, influence of peers on the participants in this study raises a critical issue regarding the design and delivery of programs and services. Perhaps the design of initiatives in which individuals with similar experiences and interests gather and provide mutual support is naïve and further damaging over time for the injection drug using population. How does an individual distance him- or herself from the only life that is familiar? Regardless of the support received through various programs and services, the lure of what is familiar, and oftentimes exciting, is too much for many individuals to resist if it is not replaced with something meaningful. An example of a 'meaningful replacement' was identified during a conversation with an injection drug user external to this study. The individual was desperately trying to resist injecting, but he was experiencing difficulty because all of the people in his social network were injection drug users. The combination of unemployment and reduced social interaction resulted in many empty hours in the day which needed to be filled, or he would begin injecting again simply from boredom. The individual began volunteering with the local Humane Society as a dog walker because he knew that he needed something to do and he loved dogs, but he had never been in a position to own one.

Using this scenario as an example, service providers need to begin exploring both appropriate harm reduction and health promotion strategies with clients who inject drugs. Although it is certainly helpful to employ strategies to reduce the negative impact of injection drug use, identifying opportunities for injection drug users to develop personal skills external to their injection drug use may sustain their sense of confidence and competence for years to come.

The value of harm reduction approaches with the injection drug using population cannot be overstated. The model of harm reduction must be incorporated into existing education programs of all health and social science programs. Creative approaches to integrating health promotion/harm reduction strategies with medical care need to be developed.

Strengths and Limitations of the Study

This study examined the experiences of a small group of injection drug users living with HIV infection in Edmonton. Participants were selected using purposive convenience sampling. Because the sample population was not randomly selected and was small, the participants may not be representative of the larger injection drug using population who is living with HIV. There may be significant differences between participants who volunteered to be part of the study and those who did not. For example, an individual who tried injection drugs only one time and contracted HIV has very different issues and experiences from the women and men who were interviewed for this study. Therefore, the results of this study cannot be generalized to all individuals living with HIV infection through injection drug use.

The diversity of the sample population strengthens the research findings. The age of participants ranged between 18 and 52 years, and the participants comprised three main ethnic groupings, including Aboriginal, Métis, and Caucasian. Although data from a small sample of HIV-positive injection drug users cannot be assumed to be generalizable to all injection drug users living with HIV infection, the contextual data could help others determine the applicability of findings to other groups.

The familiarity of the researcher with the study population and the phenomenon of injection drug use strengthens the design of this study. If the investigator already fits into a particular environment and is familiar with its structure and organization, there is a level of understanding and trust between the researcher and the individuals being studied. They have a shared language and set of experiences that are mutually understood (Roseneil, 1993). "The researcher knows the language and symbolic meanings of those being studied. This enables the researcher to avoid meaningless and irrelevant questions, and to probe sensitive areas with greater ease" (Reimer, 1977, p. 474).

Despite familiarity with the sample population, my inexperience with the research process was evident in the data generated through the personal interviews. The initial interviews tended to be somewhat fragmented, and the quality of the data improved with each interview as I learned to track the individual's story rather than follow the interview guide as outlined. Upon reflection, the focus of my investigation was too broad. The participants and I were emotionally exhausted after exploring their childhood experiences and injection drug practices, which is reflected in the data generated with the latter questions of the interview guide. For example, data generated in the final topic related to health services is very limited. Due to my personal time constraints with conducting the

interviews, only one interview was conducted with each participant. I believe the quality of the data would be stronger if I had conducted a follow-up interview to validate and clarify the findings of this research.

Reflections: The Research Process

Overall, I have enjoyed the challenge of completing this research study. Although I have worked with the injection drug using population for many years and I have had the privilege of hearing many personal stories, I was not prepared for the emotional challenges I experienced when working with the data. I struggled for many months until I was finally able to understand the basis for it. It was not frustration with the research process or the topic of my research as I'd previously surmised, but rather the impact of the stories on a very personal level. I had become a mother for the first time just prior to beginning this research. I found it difficult to separate the women's experiences of abuse as toddlers and young children from my daughter. Once I understood the core issue, however, I was able to process the impact and complete my research.

Although I have learned a great deal about the research process, I regret that I cannot offer something more concrete to the participants of this study. They were very courageous in sharing the details of their lives with me, and I wish that each individual could benefit from his or her participation. Without fail, I shall follow through on my commitment to make the results of my study available to each of them as well as to relevant service providers.

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APPENDIX A

GUIDE FOR RECRUITMENT

Guide for Recruitment

Date

My name is Nancy McPherson. I am a community health nurse and a graduate student in Health Promotion Studies at the University of Alberta. For my Master's thesis, I am exploring the characteristics of injection drug users with recent acquisition of HIV in Edmonton. I would like to interview patients from your clinic about their drug and sexual practices. The intent is to better understand the context of their risk for HIV infection to develop more effective prevention strategies in the future.

I am asking for your help with recruiting participants for my study. This will mean identifying patients who would be appropriate for me to interview and asking them if they would be willing to meet with me. You will need to give a general explanation of the study and provide some specific information before the patient is able to agree to participate. I have included the information you will need to help with the recruitment.

Five criteria will be used to identify potential participants. The criteria is as follows:

1. The participants have a documented seroconversion or laboratory evidence of HIV acquisition within the past two years.
2. The participants were living in northern Alberta during the period when seroconversion is thought to have occurred.
3. The participants were injection drug users during the period in which seroconversion is thought to have occurred.
4. The participants must consider themselves primarily residents of Edmonton.
5. There must be representation of both women and men.

Interviews will take approximately one and a half hours. Participation in this study is voluntary. Even if individuals agree to participate in this study, they can change their mind at any time by telling me they don't want to continue. They can also refuse to answer specific questions. The participant can decide where is the best place to meet such as the clinic, another agency he or she goes to or their home. Each participant will be paid $20.00 at the end of the interview in appreciation for their time. All information will be kept confidential. Being involved in this study involves no known risk to the participants.

If you have any questions or concerns about this study, I may be called at 453-1143 or my supervisor, Dr. Doug Wilson at 492-7385. Thank you for assisting with participant recruitment for this study.

Sincerely,

Nancy McPherson

APPENDIX B

INFORMATION LETTER FOR PARTICIPANTS

Information Letter for Participants

Date

My name is Nancy McPherson. I am a community health nurse and I used to be a member of the committee that looks after Streetworks. I am also a graduate student in Health Promotion Studies at the University of Alberta. For my Master's thesis, I am doing a study on HIV infection in Edmonton. I want to talk to people like you who have HIV through injecting drugs.

If you are willing, I would like to ask you some questions about some of the problems you are dealing with everyday including injecting drugs, sex and past experiences with abuse. We can meet where it is best for you. It could be the HIV Outpatient Clinic, an agency that you go to or in your home. This meeting will take about one and a half hours. I would like to tape record our talk so I can listen to it later. Even if you agree to meet with me, you can change your mind later. You can also refuse to answer any of the questions. Your help with this study is really important. I want to learn more about your experiences. Then it may be possible to plan better programs to prevent HIV through needle use. You will be paid $20.00 for your time at the end of the interview. Being involved in this study involves no known risks to you.

Your name and anything you say that would identify you will not be available to anyone except myself and one other person who will hear the tape. All the information you give me will be stored in a locked cabinet in my home. It will be kept for five years after the study is finished and then it will be destroyed. Your name will never be used in any presentations or publications of the study results. All the information is confidential except when professional code of ethics and/or the law require it to be reported. If this information is used in any further studies, ethics approval will be sought again.

If you have any questions or concerns about the study, you may call me, Nancy McPherson, or my supervisor, Dr. Wilson. If you want to talk with someone who is not connected with the study, please contact the Patient Relations Department of the CHA. The telephone numbers are below. Thank you for being part of my study.

Nancy McPherson
Centre for Health Promotion Studies
University of Alberta
453 1143

Dr. D. Wilson
Department of Public Health Sciences
University of Alberta
492-7385

Patient Relations Department
Capital Health Authority
Edmonton, Alberta
407-1040

Sincerely,

Nancy McPherson

APPENDIX C

CONSENT FORM

Consent Form

Title of Project: An Exploratory Study of the Characteristics of Injection Drug Users with Recent Acquisition of HIV in Edmonton.

Principal Investigator(s): Nancy McPherson
Graduate Student
Centre for Health Promotion Studies
University of Alberta
Edmonton, Alberta
453-1143

Co-Investigator(s): Dr. Doug Wilson
Public Health Sciences
University of Alberta
Edmonton, Alberta
492-7385

Dr. Stan Houston
University of Alberta
Edmonton, Alberta

Do you understand that you have been asked to be in a research study?
Yes No

Have you read the copy of the attached Information Sheet? Yes
No

Do you understand the benefits and risks involved in taking part in this
Yes No
research study?

Have you had an opportunity to ask questions and discuss this study?
Yes No

Do you understand that you are free to refuse to participate or
Yes No
Withdraw from the study at any time? You do not have to give a
Reason and it will not affect care.

Has the issue of confidentiality been explained to you? Do you
Yes No
understand who will have access to your records?

This study was explained to me by: _____

I agree to take part in this study.

Signature of Research Participant	Date	Witness
Printed name		Printed name

I believe that the person signing this form understands what is involved in the study and voluntarily agrees to participate.

Signature of Investigator or Designee	Date

APPENDIX D

INTERVIEW GUIDE

Interview Guide

Before we begin, do you have any questions about my study?

Demographics

A. 1. Age:

2. Gender:

3. Ethnicity:

4. Grade completed:

5. Where were you born?
probe: city, small town, rural

6. Who raised you?
probe: parent(s), relative, foster home

7. How old were you when you left home?

8. Marital status:

9. Number of children:
a) How many are living with you?
b) Who do the others live with?

10. Where do you live now?
probe: city, small town, rural

Income and Social Status

1. Are you currently working?
a. (If yes) full-time, part-time, casual:
b. (If no) where do you get your money from?

2. What is your monthly income?

3. Do your friends work?

4. What do you do if you run out of money?

Physical and Social Environment

1. Do you have a place to live?
   a. (If yes) how long have you been there?
   b. (If no usual place) when was the last time you had a regular place to live?

2. (If in Edmonton intermittently) Where do you travel to and from? (probe: another province, reserve, etc.)

3. Do you feel you get enough to eat?
   a) What did you eat yesterday?
   b) Where do you get your food?

4. Have you ever been in jail?
   a. (If yes) when and where?
   b. For how long?

5. Did you inject in jail?
   a. (If yes) how did you get needles?
   b. (If yes) where did you get the drugs?

6. Did you ever have your needles taken from you when you were in jail?

7. Have you experienced physical or emotional abuse?
   probe: at home, in a foster home

8. Have you ever experienced depression?

9. Have you ever thought about killing yourself?

Social Support Networks

1. If you needed to talk with somebody or borrow some money, who would you call?

2. Now think of your closest friend… when was the last time you got together with that person?

3. What did you do on Christmas day?

4. What sorts of ways do you help your friends and what ways do they help you?

5. Who is your family now?

Personal Health Practices and Coping Skills

A. Injection drug use:

1. How old were you when you first used?
   a) Who showed you how?
   probe: did they hit you?
   b) Did anyone else in your family use?
   c) Can you tell me about the time you first injected?
   probe: what was happening in your life, why did you want to start

2. What drugs do you usually inject?
   a) Do you take any others?
   b) What do you take if you can't get your drug of choice?

3. How often do you fix?
   a) How many times a day?
   b) How many days a week?

4. When you fix, do you do it by yourself or with other people?
   a) If others, who are they?
   probe: friends, partner, relatives, a "doctor"

5. Where do you usually fix?
   probe: at home, at a friend's, shooting gallery, public place

6. Where do you get your rigs?

7. If and when you ever borrowed rigs,
   a) Who with?
   probe: partner, friend, stranger
   b) Why did you need to borrow?
   probe: no needles available, stoned and didn't care, knew the person was "safe"

8. Why couldn't you or didn't you get clean needles?

9. Did you ever share cookers, water or filters, etc.?

10. Have you ever tried to quit?
    a) (If yes) Did you go into treatment or counseling or stop on your own?
    b) Did it help?
    c) Why do you think you haven't stopped injecting completely?

11. Is there anything you can think of that would help you stop using?

B. Condom Use

1. Do you ever use condoms?

2. Did you use a condom the last time you had sex with your regular partner?
    a) If no, do you remember why not?

3. Did you use a condom the last time you had sex with someone other than your regular partner?
    a) If no, do you remember why not?

4. How do you decide when to use a condom and when not to?

5. Do you use lube?
    a) (If yes) Do you ever use only lube and no condom?

6. Have you ever paid/been paid for sex?
    a) (If yes) How often do you use a condom then?
    b) Have you ever offered/been offered more money not to use a condom?

7. Have you ever been pressured in any way not to use a condom?
    a) (If yes) Can you tell me about that?

8. Was your first sexual experience one that you wanted?
    Can you tell me about it?

C. HIV Diagnosis

1. Before you found out you were positive, did you think you were at risk?
    a) (If no) What made you feel that you weren't at risk?
    b) (If yes) What stopped you from being able to protect yourself?

2. Before you found out you were infected, did you know anyone with HIV?

3. Some people say they thought they'd get HIV sooner or later and that there wasn't much they could do about it. Did you ever feel that way?

4. When did you find out you tested positive for HIV?
   a) Had you been tested before?

5. Why did you decide to get tested again?

6. Did you do anything different between your last negative test and your positive test?

7. Is there anything you can point to and say, "That's probably when I got HIV because…"

8. Did you ever borrow rigs or have sex with someone you knew had HIV?
   a) (If yes) Did you know at the time or find out later?
   b) Can you tell me more about that?

9. Some people say that they went on a real binge and fixed like crazy when they first found out they tested positive. Did that happen to you?
   Probe: Can you tell me more about that?

10. Do you have other conditions like Hepatitis B or C or TB?
    a) Has that had an impact on how you're able to manage your HIV?

Health Services

1. Do you have a regular doctor?
   a) If no, where do you go for medical help?

2. Can you tell me about your experiences with . . . (answer from above)?

3. What places (health services) didn't work for you and why?

4. Where or who do you usually get advice from?

5. Where did you get tested for HIV the last time?

6. Have you ever used Streetworks?
   a) Do you know what they do?

7. Are you aware of the new treatments for HIV?
   a. (If yes) how do you think they will affect you?
   b. (If on treatment) What would help you with the schedule for your pills?

8. Did hearing about the new treatments for HIV make you think HIV might not be so serious anymore?
   probe: new treatments such as drug therapy, traditional medicines

9. If you think about the friends or an agency or wherever you get support from…
   a) What is about them that work for you?

10. Some people say that their HIV diagnosis was sort of a wake-up call and it helped them get their life straightened around. Would you describe yourself as healthier since you got your HIV diagnosis?
    Probe: Can you tell me more about that?

11. What do you think would help people who inject drugs in Edmonton to protect themselves from HIV?

APPENDIX E

REVISED INTERVIEW GUIDE

Revised Interview Guide

Before we begin, do you have any questions about my study?

Demographics

A. 1. Age:

2. Gender:

3. Ethnicity:

4. Grade completed:

5. Where were you born?
Probe: city, small town, rural

6. Who raised you?
Probe: parent(s), relative, foster home

7. Tell me what it was like growing up.

8. How old were you when you left home the last time?
Probe: Was there a specific event that made you leave?

9. What has happened between the time you left home and today?

10. Marital status:

11. Number of children:
a) How many are living with you?
b) Who do the others live with?

12. Where do you live now?
Probe: city, small town, rural

Income and Social Status

1. Are you currently working?
   a. (If yes) full-time, part-time, casual:
   b. (If no) where do you get your money from?

2. What is your monthly income?

3. Do your friends work?

4. What do you do if you run out of money?

Physical and Social Environment

1. Do you have a place to live?
   a. (If yes) how long have you been there?
   b. (If no usual place) when was the last time you had a regular place to live?

2. (If in Edmonton intermittently) Where do you travel to and from?
   (Probe: another province, reserve, etc.)

3. Do you feel you get enough to eat?
   a) Where do you get your food?
   b) What did you eat yesterday?

4. Have you ever been in jail?
   a. (If yes) When was the first time?
   b. How many times have you been in jail?
   c. When was the last time?

5. Tell me about your experiences in jail.

6. Did you inject in jail?
   a. (If yes) how did you get needles?
   b. (If yes) where did you get the drugs?

7. Did you ever have your needles taken from you when you were in jail?

8. Have you experienced physical or emotional abuse?
   probe: at home, in a foster home

Social Support Networks

1. If you needed to talk with somebody or borrow some money, who would you call?

2. Now think of your closest friend... when was the last time you got together with that person?

   What did you do on Christmas day?

4. What sorts of ways do you help your friends and what ways do they help you?

5. [If not connected to family of origin]
   Who is your family now?

Personal Health Practices and Coping Skills

A. Injection drug use:

1. How old were you when you first used?
   a) Who showed you how?
   Probe: did they hit you?
   b) Whose needle did you use?
   c) Did anyone else in your family use?
   d) Tell me about the time you first injected.
   Probe: what was happening in your life, why did you want to start

2. What drugs do you usually inject?
   a) Do you take any others?
   b) What do you take if you can't get your drug of choice?

3. How often do you fix?
   a) How many times a day?
   b) How many days a week?

4. When you fix, do you do it by yourself or with other people?
   a) If others, who are they?
   Probe: friends, partner, relatives, a "doctor"

5. Where do you usually fix?
   Probe: at home, at a friend's, shooting gallery, public place

6. Where do you get your rigs?

7. If and when you ever borrowed rigs,
   a) Who with?
   Probe: partner, friend, stranger
   b) Why did you need to borrow?
   Probe: no needles available, stoned and didn't care, knew the person was "safe"

8. Why couldn't you or didn't you get clean needles?

9. Did you ever share cookers, water or filters, etc.?

10. Have you ever tried to quit?
    a) (If yes) Did you go into treatment or counseling or stop on your own?
    b) Did it help?
    c) Why do you think you haven't stopped injecting completely?

11. Is there anything you can think of that would help you stop using?

B. Condom Use

1. Do you ever use condoms?

2. Did you use a condom the last time you had sex with your regular partner?
   a) If no, do you remember why not?

3. Did you use a condom the last time you had sex with someone other than your regular partner?
   a) If no, do you remember why not?

4. How do you decide when to use a condom and when not to?

5. Do you use lube?
   a) (If yes) Do you ever use only lube and no condom?

6. Have you ever paid/been paid for sex?
   a) (If yes) How often do you use a condom then?
   b) Have you ever offered/been offered more money not to use a condom?

7. Have you ever been pressured in any way not to use a condom?
   a) (If yes) Can you tell me about that?

8. Was your first sexual experience one that you wanted?
   a) Can you tell me about it?
   b) How old were you at the time?

C. HIV Diagnosis

1. Before you found out you were positive, did you think you were at risk?
   a) (If no) What made you feel that you weren't at risk?
   b) (If yes) What stopped you from being able to protect yourself?

2. Before you found out you were infected, did you know anyone with HIV?

3. Some people say they thought they'd get HIV sooner or later and that there wasn't much they could do about it. Did you ever feel that way?

4. When did you find out you tested positive for HIV?
   a)Had you been tested before?

5. Why did you decide to get tested again?

6. Did you do anything different between your last negative test and your positive test?

7. Is there anything you can point to and say, "That's probably when I got HIV because…"

8. Did you ever borrow rigs or have sex with someone you knew had HIV?
   a) (If yes) Did you know at the time or find out later?
   b) Can you tell me more about that?

9. Some people say that they went on a real binge and fixed like crazy when they first found out they tested positive. Did that happen to you?
   Probe: Can you tell me more about that?

10. Do you have other conditions like Hepatitis B or C or TB?
    a) Has that had an impact on how you're able to manage your HIV?

D. Depression

1. Have you ever experienced depression?

2. Have you ever thought about killing yourself?

Health Services

1. Do you have a regular doctor?
   a) If no, where do you go for medical help?

2. Can you tell me about your experiences with . . . (answer from above)?

3. What places (health services) didn't work for you and why?

4. Where or who do you usually get advice from?

5. Where did you get tested for HIV the last time?

6. Have you ever used Streetworks?
   a)Do you know what they do?

7. Are you aware of the new treatments for HIV?
   a. (If yes) how do you think they will affect you?
   b. (If on treatment) What would help you with the schedule for your pills?

8. Did hearing about the new treatments for HIV make you think HIV might not be so serious anymore?
   Probe: new treatments such as drug therapy, traditional medicines

9. If you think about the friends or an agency or wherever you get support from…
   a) What is about them that work for you?

10. Some people say that their HIV diagnosis was sort of a wake-up call and it helped them get their life straightened around. Would you describe yourself as healthier since you got your HIV diagnosis?
    Probe: can you tell me more about that?

11. What do you think would help people who inject drugs in Edmonton to protect themselves from HIV?

APPENDIX F

PERSONAL HEALTH PRACTICES

Personal Health Practices & Coping Skills
(Injection Drug Use, Condom Use & Depression/Suicide Attempts)

Age of 1st injection
- range from 14 to 46 years
- 14 to 19 years (6)

Drug of choice
- cocaine (7)
- T&R's (3)

Access to drug paraphernalia
- friends, family members, dealer, pharmacy, Streetworks program

Shared equipment
- needles & syringes, spoons, filters, water

Access to drug treatment programs
- 6 participants
- primary reasons:
    - recent overdose
    - 'hit rock bottom'

Condom use
- consistently (0)
- with strangers (5)
- when working (5 women)
- never (2 men)

Depression
- history (9)
- current (3)

Suicide attempts
- reported (8)
- none violent